

By the same authors

MODERN PHYCHOLOGY AND EDUCATION

MATTER AND METHOD IN EDUCATION



"One can't believe impossible things."

"I dare say you haven't had much practice," said the Queen.

Matter and Method in Education

By

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PREFACE

EDUCATION is accounted by most men, even educationists, to be a very dull subject, and, of all branches of education, details concerning the internal organization of schools are the least interesting. If it were not for an inquisitive examination such things might be left a dark mystery and learnt only when the recruit has passed in, as are the routine arrangements of a government department ; or, if there were no psychological principles underlying them, might be compressed into books and learnt by heart just before the examination, as Book Keeping and Trust Accounts are learnt by the budding solicitor. But education is in a different position. Only one specially appointed can call for a solicitor's books, whereas every newspaper writer and demagogue thinks he ought to have a voice in education, so that the schools must be continually explaining themselves and exhibiting to a bored world the dreary mechanism by which they keep themselves going.

This view is, however, a mistake. The contemplation of the arrangements in any one school at any one moment is dull, but those same arrangements become interesting when seen as part of a process of development. Elementary education in England as a function of government only dates back to about 1840—in the ninety years which have passed since then we have the change from bad buildings, incompetent teachers, unruly children to the very handsome and pleasant places which many schools are to-day. In the "Codes" of successive years one can follow stages in the development of ideas. In 1873 it is first specified as a condition of the grant that schools shall be adequately warmed. In 1875 the minimum requirements as to space are prescribed :—

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"80 cubic feet of internal space per child and 8 square feet of floor space."

But there is another side to the history. Whenever mankind tries to apply its good ideas practically, appalling perversions follow ; and the more practical the application is, the worse the perversion. Pure Mathematics has few sins to its count ; Medicine and Education along with Political Economy and Religion, have thousands. The very fact that the inventors of the ideas were actuated by the most disinterested zeal for the public good makes the results the more tragic. The history of Education can be read as an example of the perennial struggle of the idea with the cruelty and meanness of human nature. If looked at in this way the "Codes" of the Board of Education become tragic comedy. It is not only Mr. Lowe's Revised Code of 1862 which, promulgated with the best intentions, brought some thirty-five years of misery to the schools, but it is little touches such as this alteration of 1872, which are significant.

"The paragraph which reads 'Attendance at drill, under a competent instructor for not more than two hours a week for twenty weeks in the year, may be counted as school attendance' is amended to read 'Attendance of boys at drill . . . etc.'

In this book we have attempted to show how present conditions in the schools have developed from the past. This is not a history of education, there are many such ; it is an exposition of school practice and methods of to-day against their historical background. It is hoped that this will to some extent save it from the curse of dullness. It may also help to remind teachers and students that to-morrow will regard us as we regard yesterday.

Occasionally criticisms are offered of special points and improvements suggested. It was not possible to treat all subjects thus, nor would it have been profitable. Within the compass of one book so much cannot be

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accomplished. Arithmetic, Music, Physical Training are highly technical subjects with their own aims and methods. This is a general work and the authors have thought it best not to try and turn it into a handbook of special method.

The readers for whom this book is chiefly intended are students needing a text book in Education, as distinct from Psychology ; it is also for those of the outer world who take a friendly interest in that unexplored land—the elementary school. The ordinary man of university training, unless he started his education in an elementary school, has little or no idea of the conduct of one ; and can ask quite innocently : “ What *do* they teach nowadays in those Board Schools ? ” If this book does anything to lighten the ignorance of such it will have achieved more than it might fairly hope.

THE EDUCATED MAN

"AN educated man is one who has thought and read much on the subjects proper to his age and country, so that he is ready in talk and at no loss in the society of strangers. He knows the uses of words and speaks clearly and elegantly. He has the power to pass in thought over great distances of space and time, and thus he is not deceived as to his own importance, and is as ready to discuss Sardanapalus as his next door neighbour. He will also travel readily and, being already familiar in thought with the ways of other lands, adapts himself rapidly when he actually encounters them.

"He is one that is quick to note the thoughts and emotions of others and is therefore not unseasonable in his jests nor, when calling, does he outstay his welcome.

"He is not often dressed in the height of fashion, for he thinks it beneath him to contend in such matters ; nor is he slovenly, for he holds his body the temple of his mind and keeps it well garnished accordingly.

"He is proud of his own mental powers and will think for himself on matters that are within his knowledge ; For those that are without he consults some eminent authority. When he goes to the theatre he does not weep or applaud as the majority do, but watches calmly, wondering if such display of emotion is justified. When his city goes to war he will be one of the first to join the army if he thinks the cause just ; but the last, and then only under compulsion, if he thinks it unjust ; for even

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in the hour of national danger he wishes to rule his own actions.

" In general life he is pleasant and unassuming, for he knows his own ignorance and the fallibility of human reason. And when he dies he has no boasts engraved on his tombstone ; he knows that stones perish, or at best garnish a museum for the herd to gape at on Sundays."

PART I

INTRODUCTION

"The gratifying feeling that our duty has been done."

THE writers once met a little girl of six in the dining room of a country hotel. She had a doll, by name Cynthia.

"Is Cynthia good?" we asked.

"Oh, yes," answered the child. "She smiles; she is happy."

This identification of the state of goodness and happiness in life is the distinguishing characteristic of the outlook of and on childhood to-day, and is in sharp contrast to the attitude of seventy years ago. To-day those concerned with the upbringing of children accept as serious principles what the best poets, especially those of the Romantic Revival, have always taught—that not only the beauty of childhood, but its whole purpose and value lie in the happiness which is possible at that period, which can never be recaptured, and in exchange for which the years which pass can offer only faith and philosophy.

To-day a child is expected to be happy, and if we find him crying we try to discover the cause of his grief and remedy it. He is expected to be healthy, and if he is sick unto death we feel bitterly self-reproachful:—especially if the disease is due to defective drains. The languorous sentimentality which surrounded the bed of the dying child with angel voices and the airs of a better land has lost its appeal. Few now read the *May Queen* without vexation; *Ora pro Nobis* provokes a smile.

It is not even considered attractive to look unhealthy. A generation ago when young women decorated a room

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for a dance they shaded the lights with green, because that made them look pale and interesting ; nowadays they use red or orange !

When we look back on the nineteenth century, the most revolting feature is the co-operation of religion with misery. Current religion had three elements which had a great influence educationally and socially, and which seem to us to-day definitely wrong, or at least completely misapplied. These were as follows :—that children are wicked by nature, and that their wickedness can only be restrained and overcome by the most continual watching by their parents ; that society is arranged in a strict order, and that each child has his place in that order and must not leave it ; and lastly that we should learn resignation, and not fight against divine decrees. The last position was most clearly connected with the matter of health. The early nineteenth century abounded with preventable suffering and early death. Probably half the children born died under the age of two ; one finds in the biography of most of the famous men, and of nearly all the women such phrases as “ He gallantly continued his work in spite of continual attacks of his old malady.” People were always ailing, and the average age at death was much younger than at present. Medical and physiological knowledge was too slight to deal with these evils in a satisfactory way. All that man could do was to abandon himself to a higher power and say, “ Thy will be done.”

A very good example of the change of attitude between that age and our own is afforded by the life of the Englishman in India two generations ago. He did not then understand how to resist the diseases of the country. He therefore left his servants to manage in their own way, ate what they provided, and when he died of cholera or typhus thought it was the hand of God. To-day the officer’s wife visits the cook-house three or four times a day, stands by while every pot is scalded out, looks at everyone’s hands to see if they are clean,

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and fines any servant who has a spot of dirt on his tunic. We are still religious, but we do not regard germs as part of holiness, nor dying young as a sign of God's favour.

We have also abandoned the doctrine of Original Sin, at least so far as it concerns the upbringing of children. Life for the unhappy mites of 1850, and thereabouts, was one long struggle against nature. Play was wicked, satisfying your hunger was wicked, anything except sitting still and sewing or reading a good book was wicked. The dreadful temptations against which children struggled were nothing but natural impulses which to-day we regard as almost virtuous. Men now alive can remember that in their youth to play was regarded as a sure sign of the wickedness of their hearts. Such activity was tolerated on week days; it was absolutely forbidden on Sundays. "The child that plays when he is a child will play when he is a man." These were the days of "hard work".

The means by which children were kept to this hard régime was fear of the rod or of Divine Wrath. "A person of good principles, my dear," says Mrs Fairchild, "is one who does not do well for fear of the people he lives with, but from the fear of God." One of the writers remembers meditating tearfully many nights in bed on the hymn :

Teach me to live that I may dread
The grave as little as my bed;
Teach me to die, that so I may
Rise glorious at the awful day.

The trouble was that she, like poor Sophia Jex Blake at somewhat the same age half a century earlier, could not be quite sure of her fate in the next world. Writes Sophia in her self-examination :

"If you died this instant what would become of you? I know not what would become of me, but I fear I should go to eternal torments. And do not think that I could face death unflinchingly for this reason."¹

¹ Todd's *Life of Sophia Jex Blake*.

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For the modern child Hell Fire has lost its terrors ; parents of an older age spent much ingenuity on making children realize them fully.

If we go back to the middle of the eighteenth century, we find an education based on this principle in full swing. Parents meant nothing but good to their offspring, yet treated them rather worse than criminals are treated to-day. Here is the pious Mrs Wesley, the mother of the famous Charles and John, giving an account of her educational methods in a letter written in old age at the request of her sons.

" When turned a year old (and some before) the children were taught to fear the rod, and to cry softly ; by which means they escaped abundance of correction they might otherwise have had ; and that most odious noise of the crying of children was rarely heard in the home. . . . None of them were taught to read till five years old. The way of teaching was this : One day was allowed the child wherein to learn its letters, great and small, except Molly and Nancy, who were a day and a half before they knew them perfectly . . . and your brother Samuel, the famous hymn writer that is, who was the first child I ever taught, learnt the alphabet in a few hours. He was five years old on the tenth of February, and the next day he began to learn and as soon as he knew the letters, began the first chapter of Genesis. He was taught to spell the first verse, then to read it over and over, till he could read it off hand without any hesitation ; so on to the second, etc. (till he took ten verses at a lesson, which he quickly did). . . . By Whitsuntide he could read a chapter very well.

" There was no such thing as talking or playing allowed of ; but everyone was kept close to their business for the six hours of school."

Mrs Sherwood, the author of *The Fairchild Family*, whose father was a clergyman, describes her childhood thus. She was born in 1775 :

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"It was the fashion then for children to wear iron collars round the neck, with a backboard strapped over the shoulders : to one of these I was subjected from my sixth to my thirteenth year. It was put on in the morning and seldom taken off till late in the evening, and I generally did all my lessons standing in stocks, with this stiff collar round my neck. At the same time I had the plainest possible food, such as dry bread and cold milk. I never sat on a chair in my mother's presence. Yet I was a very happy child, and when relieved from my collar I not unseldom manifested my delight by starting from our hall-door and taking a run for at least half-a-mile, through the woods which adjoined our pleasure grounds. . . .

"After my brother was gone to school I still carried on in my Latin studies, and even before I was twelve I was obliged to translate fifty lines of Vergil every morning, standing in these same stocks, with the iron collar pressing on my throat."

It may well be argued, that such superiority as we can claim in humane treatment of children is more due to our greater physiological knowledge than to anything else. Fortunately we now know that muscles must be exercised to grow well, that fresh air and sunshine are necessary to health and sanity. The would-be hypochondriac may not to-day indulge in a single complaint. "Vapours" and "declines" have gone. The "nervous headache", and "nerves", are no longer helplessly condoned. A course of sunlight treatment, fresh air, or a respite from late nights or work is prescribed. If we refuse the treatment, our neighbours soon make it clear that we are stupid and a nuisance, and neither "interesting" nor picturesque. Health is felt to be a duty we owe to others, as well as a pleasure due to ourselves.

The modern search for health and happiness has, of course, given the Press ample opportunity for diatribes against modern youth. It must be annoying to the conservative parent who was, or ought to have been, so

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tractable, biddable, and obedient to *his* parents, to find children nowadays so blusteringly and energetically determined about what they want ; so resolutely intent on a share in the joy of living. But there is a pleasant side to the matter. "In this respect" (good temper), writes Lord Ribblesdale,¹ "I notice a great improvement in these latter days. In my youth (the mid-Victorian period) people were frequently—almost generally—cross to one another. I attribute the change to the urbane sway of restaurant life and the music halls, to the Riviera Express and winter sports—the world is more amused and so better pleased."

Schools to-day express this change. The equivalents of Riviera expresses and winter sports have an important place. Life there is more amusing and the children's pleasure is a crucial test of the soundness of their training.

And not only schools, but many other social institutions attached or unattached to the school now care for the child's happiness and health. The school medical service, the playgrounds in the parks, the present movement to establish more playing-fields, public swimming baths, the Co-operative Society's cinemas, juvenile libraries, play-centres, Boy Scout and Girl Guide movements are a great blossoming of the spirit which first showed itself in the early Factory Acts of the nineteenth century, and in the foundation of the Society for the Prevention of Cruelty to Children.

In adult life too a distinct change is discernible, especially since the Great War. Most people in the twenties and thirties have given up living for a distant to-morrow of retirement, old age, or heaven. Their creed is not "Let us eat, drink and be merry for to-morrow we die," but rather that since lilies bloom and birds sing and music and travel are sweet let us enjoy them while we may. Some grandparents are converted to their grandchildren's views, or themselves lead the

¹ *The Ancestor.*

INTRODUCTION

way in the present demand for the things that make life pleasant.

The doctrine of an unchanging social order has also broken down. There is no longer a great gulf fixed between the leisured and the working classes, but many individuals change from one to the other and amusements and hobbies are common to both.

The workman demands leisure, in which to enjoy games, wireless and the gramophone. The motor-cycle and light motor car take him to the sea and the country, cheap foreign travel takes him to Europe and America ; he has demanded, and in many cases found, labour-saving houses which set his wife free to enjoy life too.

These conditions are by no means universal ; but they are spreading and are daily more insisted upon ; and whether we approve or not of this raised standard of leisure and of living, the best elementary schools are everywhere training a generation of men and women whose standards of living will be still higher. In as far as modern education is successful, ugliness in factories and in homes, merely mechanical labour, bookless towns, cruel laws, and still more hurtful conventions will not be tolerated.

The last thirty years have seen a revolution in the amenities of life, in everything that scientific knowledge and skill can touch. The next thirty years will see still more far-reaching changes. Those responsible for the training of children are faced by the problem of what kind of person the future will demand and what manner of man will be best able to use what the future will offer.

This of course is no new position. The educationist of every period has been faced with the problem of adjusting the child to his environment and, as the environment differed from age to age and from class to class, so have the methods used. Sometimes environment and method conspired together with the most brutal completeness. The charity school of about 1830 as mirrored in *Jane Eyre* was training children, who

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would hold menial positions in after life, to submit themselves to all their governors, teachers, spiritual pastors and masters ; to order themselves reverently to all their betters . . . and to learn and labour truly to get their own living, and to do their duty in that state of life, unto which it should please God to call them. As their state of life would involve insult, poor food, bad clothes and the deprivation of most of the ordinary comforts of life and pleasures of society, they were starved and maltreated at school ; and those who did not die of it, were sent into the world ready to bear their lot with fortitude and resignation.

So too in the elementary schools, or even the training colleges of a rather later date, only so much book learning was taught as seemed appropriate to boys and girls of the working classes ; and the children were prepared to take up their humble place in society by suitable methods of repression.

On the other hand "ladies" were trained early for their duties. They learnt housework, so much reading and writing as would improve their minds without over-taxing the female intelligence, and to be condescending to the lower orders.

Education to-day has to equip the child to enjoy himself in life, and enjoyment depends on health, intelligence, the power of steady work and the possession of those virtues which society esteems. The function of the school is still to mould character and to impart knowledge, but the virtues to be cultivated and the knowledge to be imparted have changed very markedly in the last thirty years.

If we want a statement of the aim of education we can take a passage that has held its place in the *Code*¹ for the last twenty-three years.

"The purpose of the Public Elementary School is to form and strengthen the character and to develop the intelligence of the children entrusted to it, and to make

¹ *Elementary Education Provisional Code*, 1922, p. 7.

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the best use of the school years available in assisting girls and boys, according to their different needs, to fit themselves practically as well as intellectually, for the work of life.

" With this purpose in view it will be the aim of the school to train the children carefully in habits of observation and clear reasoning so that they may gain an intelligent acquaintance with some of the facts and laws of nature ; to arouse in them a living interest in the ideals and achievements of mankind, and to bring them to some familiarity with the literature and history of their own country, to give them some power over language as an instrument of thought and expression ; and, while making them conscious of the limitations of their knowledge, to develop in them such a taste for good reading and thoughtful study as will enable them to increase that knowledge in after years by their own efforts.

" The School must at the same time encourage to the utmost the children's natural activities of hand and eye by suitable forms of practical work and manual instruction ; and afford them every opportunity for the healthy development of their bodies, not only by training them in appropriate physical exercises and encouraging them in organized games, but also by instructing them in the working of some of the simpler laws of health. . . .

" And, although their opportunities are but brief, the teachers can yet do much to lay the foundations of conduct. They can endeavour, by example, and influence, aided by the sense of discipline which should pervade the School to implant in the children habits of industry, self-control, and courageous perseverance in the face of difficulties ; they can teach them to reverence what is noble, to be ready for self-sacrifice, and to strive their utmost after purity and truth ; they can foster a strong sense of duty and instil in them that consideration and respect for others which must be the foundation of unselfishness and the true basis of all good manners ;

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while the corporate life of the School, especially in the playground, should develop that instinct for fair-play and for loyalty to one another which is the germ of a wider sense of honour in later life."

One would hardly feel inspired by this account of the aims of education. It neglects art, it does not mention happiness. Still in comparison with the past it is liberal and it at least leaves openings for individual variations in method.

BOOKS

MRS SHERWOOD, *The Fairchild Family*.

CHARLOTTE BRONTË, *Villette* and *Jane Eyre*.

MRS HODGSON BURNETT, *Little Lord Fauntleroy*.

THE CURRICULUM

"Of shoes, and ships, and sealing-wax, of cabbages and kings."

ANY statement of the aims of education is really meaningless until one discovers how it is proposed to realize it. The description of the aims of education given in the first chapter represents school teaching as concerning itself with four sides of life—the intellectual, physical, practical, and moral ; and as means by which this aim shall be realized the Board suggests instruction in English Language, Handwriting, Arithmetic, Drawing, Handicraft, Gardening and Domestic Subjects, Observation Lessons, and Nature Study, Geography, History, Singing, Hygiene, Physical Training and Moral Instruction (which is to be inserted as most convenient).

These subjects divide themselves among the various aspects of education as follows :—intellectual education includes English Language, Writing, Arithmetic, History, Geography, Nature Study, and Observation ; physical education includes Hygiene, Physical Training ; practical education, Handicraft, Gardening, Domestic Subjects ; moral, Moral Instruction and Scripture ; while aesthetic education is represented by Drawing, Music, and some forms of English and Handwork.

The position and importance of these subjects is the result of a process of development in the schools. Originally it was intended that the three strictly useful intellectual subjects, Reading, Writing and Arithmetic, should be taught, and it was on the basis of these that the school was divided into standards. The Revised Code of 1862 specified the amount of knowledge that

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was to be expected from each child in each standard. It was as follows :—

Narrative in mono-syllables.	STANDARD I Capital and small letters from dictation.	Write figures to 20, name them, add and subtract figures up to 10 orally and from B.B.
One of the narratives next in order after monosyllables.	STANDARD II Copy in manuscript a line of print.	A sum in simple addition and subtraction and the multiplication tables.
A short paragraph from an elementary reading book.	STANDARD III A paragraph from the same book dictated as single words.	A sum in any simple rule as far as short division (inclusive).
A short paragraph from a more advanced reading book.	STANDARD IV A paragraph from the same book dictated a few words at a time.	A sum in compound rules (money).
A few lines from a poetry book used in first class of school.	STANDARD V A paragraph from a first class book dictated a few words at a time.	A sum in compound rules (weights and measures).
A paragraph from a newspaper or other modern narrative.	STANDARD VI A paragraph of the same sort dictated.	A sum in practice or bills of parcels.

These requirements seem to us to-day extremely meagre ; and when it is considered that practically the whole school day was occupied in learning them they seem more meagre still. Any more advanced instruction naturally carried the child beyond the mere elements. If he read, he must read something—History, Geography, or Literature—and to understand what he read he needed teaching in the subject matter. It was not long, therefore, before History and Geography were added to the curriculum, though for many years they were taught in a manner which deprived them of any real interest.

Physical education is a comparatively late comer into the elementary schools, and has by no means fully established itself even yet. Many of the older schools possess no adequate playgrounds and the writers know of more than one school in which the small space provided is so badly paved and so sloping that it is quite unsuitable for any physical exercises.

THE CURRICULUM

Practical training has always played a part in the schools, particularly in the form of Needlework for girls. The subject was, like Reading and Writing, too obviously useful to be omitted. But this Needlework was a very different matter from the Handwork or even the Needle-work of to-day.

Moral training also has undergone a change, not only in the virtues taught but in the methods of teaching them. Obedience has given place to orderly independence, faith to works, and the book of moral tales and maxims to the playing-field.

Lastly, aesthetic education was never contemplated in the older schools.

For comparison with the modern arrangement of subjects an example of the curriculum for boys and girls of 1879 may be given. The position of Arithmetic and the omission of certain subjects are the most interesting features.

	Boys	hours per week
Reading	$6\frac{1}{2}$
Writing (transcription, dictation, composition)	$3\frac{1}{2}$
Arithmetic	7
History (St. IV-VI)	3
Geography or History	3
Singing and recreation	2
		<hr/>
		25
		<hr/>
	GIRLS	hours per week
Reading	6
Writing, etc.	3
Arithmetic	7
Needlework	4
Grammar, or Geography, or History	3
Singing and recreation	2
		<hr/>
		25
		<hr/>

We must not then feel that the subjects as taught in the schools of to-day, or the proportion in which they are taught, represent any immemorial custom and are therefore immune from criticism or comment.

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Nor indeed does the Board think so. It has of recent years refused to prescribe either the exact subjects of instruction or the relative amounts of time that shall be allotted them. After giving the list of subjects that would normally be taught, the Code adds : "One or more subjects other than those named above may sometimes be taught with advantage to older children, provided that the instruction is suitably given and does not result in a falling off in the other subjects of the curriculum."

The schools generally accept the list of subjects as the basis of their curriculum, and may add French, or some form of Mathematics such as Geometry or Algebra. In a few cases they avail themselves of the permissive clause which provides :

"In a country school the Board will be prepared to approve a syllabus in which the teaching of Arithmetic, History and Geography is of a character less advanced than is usual, provided that the time so saved is devoted to Nature Study and practical subjects suitable for country children.

"In some town schools the Board will be prepared to approve a syllabus in which the teaching of the subjects named is of a less advanced character than usual, provided that the time so saved is devoted to hand and eye training, including in the case of children over eleven years of age, suitable and practical application of such training."

Finally, the anxiety of the Board that teachers should consider their own problems and decide for themselves is shown by an answer recently given in Parliament. The Parliamentary Secretary of the Board of Education, when asked if History could not be made to include *compulsory* teaching on the duties and responsibilities of citizenship, replied, "The article setting out the curriculum of a public elementary school is designed to leave the necessary liberty to local education authorities and managers with regard to special circumstances and

THE CURRICULUM

teachers. Any rigid obligation to give lessons in citizenship in the higher standards of all schools indiscriminately would hardly be a wise regulation in any code."

This is supported by the passage in the *Suggestions*¹:

"The curriculum must vary to some extent with the qualifications of the teaching staff. . . . A teacher, for example, who has little taste for, or knowledge of music, will produce no results of any value, and may easily do actual harm to his scholars' voices if forced to attempt instruction in it. Drawing, Handicraft and Nature Study are other subjects in which some genuine aptitude and interest on the part of the teacher are essential, if they are to be included in the curriculum. The necessary interest in any of these subjects may indeed be latent, and may be brought to light by opportunity for study, but it cannot be made to order. The teacher who has honestly assured himself that he does not possess it had better put the subject aside, and compensate his scholars for its loss by widening and deepening the rest of his work."

Time tables to-day vary very much from school to school, and the time is divided and altered differently according to whether a school is a rural or an urban one, and whether it is an infant, junior or senior school. An infant school time table now is generally a daily programme of activities, and is intended only as a framework within which there may be much variety from day to day. In junior schools the time table may be something like the following :—

Scripture,	30 mins.	a day.
Arithmetic,	45 mins.	a day.
Geography,	30 mins.	twice a week.
History,	30 mins.	twice a week.
Nature Study,	30 mins.	a week, or two 30 mins.
Needlework and Handwork	} four or five periods of Art	45 to 60 mins. each a week.
Physical Training,	20 to 30 mins.	a day.
Music,	30 mins.	twice a week, or more.
English (Reading, Composition, Literature, Recitation, etc.),	$\frac{1}{2}$ hours a day.	

¹ Ed. of 1927, p. 38.

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In senior schools half a day a week is given to practical training—in Domestic Science for the girls, and Woodwork and Metal Work for the boys. Periods of an hour or more are given to Science, and one period a week of an hour is given to Organized Games, in addition to ordinary Physical Training lessons on other days.

It would be interesting to know what forces or ideas have shaped this division of time and interest. But one thing is clear in most cases. The curriculum is a compromise. There is a generally accepted theory that the wider the curriculum the better ; there is also a strong pressure on the schools to teach the two "*useful*" intellectual subjects, English and Arithmetic. The time table shows the results of this in the predominant places of these two subjects and the variety of the subsidiary subjects.

The theory that the curriculum should be as wide as possible is based on the fact that man's nature is many-sided, and that for a full life each side of his nature should be satisfied. It is not enough to learn the necessary amount of English and Arithmetic ; man and nature alike afford thousands of interesting objects of study. Man has artistic impulses, and the making and contemplation of objects of beauty is an important addition to the pleasures of life. Moreover, different children have different tastes. One child may like Drawing, another Music. One may excel at Composition and his neighbour at Arithmetic. It is told of many eminent scientific men that they were considered fools at school because they were incapable of shining at the Classics which formed the staple part of the instruction. Further, one subject illustrates and illumines another. One's reading of literature is enriched by geographical knowledge, and Scripture may be the helpmate of History and Geography.

One may speak for a moment from a plane that transcends the elementary school stage. There are few

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greater satisfactions than the freedom of an intellectual realm that is wide in both space and time. A liberal education is the way of admission to this realm, and children who have the doors pushed ajar for them in school, become adults who find in the intellectual world a "pavilion from the strife of tongues".

Secondly it is admitted that schools should convey information that will be "useful" in later life, but it is not by any means certain which subjects are the most useful; and different ages have held different views. In the days of Elizabeth there was a statutory obligation laid on parents and schools to teach boys the use of the bow and arrow, this being a necessary piece of military knowledge. At the same period Latin was the pre-eminently useful intellectual subject. In a later age it was essential that every girl should be quick at hand sewing; now so many people own a machine that such skill is largely superfluous. Motor cars have introduced a new factor into useful knowledge, and every change in the conditions of life introduces yet further ones.

We are thus free to ask ourselves whether the subjects commonly taught in school really make for happiness; and whether any other arrangement of subjects would be more profitable. English education differs very markedly from American—as will be shown presently in detail—but it also differs in a matter of principle. America tries to adapt its children to fit into conditions as they actually are. In England, on the other hand, and in the majority of European countries and in China, the life of to-day is prepared for primarily by a study of the past. The phrase used is: "Children are enabled to understand conditions to-day better by learning how they grew up." Therefore they learn the history of the Angles and Saxons, act Shakespeare and read *Robinson Crusoe*.

It is very difficult to decide which of these two methods is the better. For the clever child there is no difficulty.

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Boswell and Johnson talked of the education of children and Boswell asked Johnson what he thought was best to teach them first. Said Johnson, "Sir, it is no matter what you teach them first, any more than what leg you shall put into your breeches first. Sir, you may stand disputing which is best to put in first, but in the meantime your breech is bare; sir, while you are considering which of two things you should teach your child first, another boy has learnt them both."

The intelligent child will learn how to deal with the world about him without any special training, and his study of the past will bring him into contact with great thoughts which he might otherwise miss, and teach him humility when he sees himself against such a mighty background. Here, perhaps, American education fails. There would be less talk of "God's own country" if the average American knew how many fallen empires had made that boast before him.

With the average child, and especially with the dull child, the matter is more uncertain. He is slower to make adjustments and needs more help in doing so. He is not sufficiently able to understand the message of the past, nor to make the applications of this knowledge to the present. Moreover, he is apt to live in two worlds, and one is an unreal school world which he sloughs off, together with his school speech, the minute he passes out of the school doors and gets back to his comfortable surroundings of experienced facts. A stupid boy will never become a denizen of the world of the mind. Is it not reasonable to make him as satisfactory an occupant as possible of the world of the body?

It is sometimes argued that the schools ought to give the rudiments, at least, of a vocational education, so that the children may leave fitted to some small extent for taking up the trades most common in their district. Others urge that a general education in History, Geography and Literature is more valuable as a preparation

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for future happiness and success than the typewriting or millinery that could be learnt in the hour or so a week that it is proposed to transfer from one to the other. Again, it is quite easy to make out a case to show that a knowledge of dancing, bridge or elementary law is more beneficial, so far as happiness and success are concerned, than any of the other courses of instruction ; and there is at least one record of a man's career ruined by his ignorance of the proper etiquette at a dance.¹ Ballroom dancing as a form of physical training and half-an-hour's bridge on Friday afternoon would not cause much loss to other subjects, and might have a profound influence for good on the children's after lives. But such a suggestion would hardly be taken seriously. While country dancing is educationally respectable, fox-trots and waltzes are not, and bridge is considered less of a stimulating mental exercise than the desultory "reading of library books" ; and, as for law, it is not even thought of, though it is of infinitely more moment to a child about to enter the world to know the conditions under which he can be turned out of his house or made to contribute to Trade Union funds, than it is to know the products of Central Africa or where the currants in his Christmas pudding come from.²

Is it possible to justify the choice of subjects in the curriculum, if they are regarded from an unprejudiced point of view ? It is not if they are looked at from the point of view of their content. If History and Geography, Literature and Nature Study are only a body of facts, they cannot be justified when compared with Law, Physiology, Electrical Engineering, or the manners and customs of motor cars. No one is really any better for knowing that William Rufus was murdered in the New Forest or that Henry VIII had many wives. They *are* better for knowing how to start a car, mend a fuse

¹ Algernon Blackwood, *Episodes before Thirty*.

² Cf. Atkin L. J.'s preface to Jenks' *Book of English Law* (1928).

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wire, or what are the effects and cure of constipation. The *useful* side of geographical knowledge might be summed up in the injunction, "Go and ask Cook's," and that, in fact, is what the *educated* person always does. On the other hand they can be justified as a method and a spirit. The Americans would perhaps call them the "inspirational" or "orientating" subjects, and, though we may scorn the words, the fact remains that through them we get into touch with wider lives and interests, and learn how to learn and what the charms of mental activity can be.

Yet it is not to the humanities alone that these delights belong. Science has its own, possibly greater pleasures, and such a school as Oundle knows how to obtain from Science advantages which have often been claimed as the exclusive privilege of the Classics. In twenty years' time our present curricula may seem as antiquated and ridiculous as do those of 1880.

America, starting from different premises, arrives at very different results. In every ordinary school and college in America the curriculum is amazingly wider than in England and fitted to the special needs of the community.

The Opportunity School, in Denver, Colorado, is a splendid example of a school developed and shaped by popular demand. It is a voluntary school for people of all ages. It is largely the result of one woman's work.

This is its prospectus :

DENVER PUBLIC OPPORTUNITY SCHOOL

DAY : Monday, Tuesday, Wednesday, Thursday, Friday.

NIGHT : Monday, Tuesday, Wednesday, Thursday.

The Opportunity School is a FREE SCHOOL located at Thirteenth and Welton Streets. It is open from 8 a.m. to 9.15 p.m. to people of ALL AGES. There are no entrance requirements. You may enter at any time during the year and devote as much time to the work as you can spare.

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Instruction is given in the following subjects :—

Auto-Mechanics	Business Arithmetic
Starting, Lighting, Ignition	Business English
Architectural Drafting	Business Spelling
Mechanical Drafting	Commercial Law
Acetylene Welding	Accounting
Electrical Welding	Book-keeping
Applied Electricity	Shorthand
Machine Shop	Typewriting
Vulcanizing	Dictaphone
Shoe Repairing	Telegraphy
Plumbing	Multigraphing
Bricklaying	Salesmanship
Paperhanging	Showcard Writing
Carpentry	Common School Branches
Use of Steel Square	High School Subjects (Day)
Blue Print Reading	Beauty Parlour Trade
Estimating	Millinery
Landscape Gardening	Sewing
Shop Mathematics	Cooking

SPECIAL FEATURES

Classes for older people who do not read or write English.

English for Foreigners. Citizenship Classes for persons desiring to take out naturalization papers. Advanced citizenship classes for those who have secured their final papers.

An Employment Bureau assists students in securing good paying positions.

A school library with an experienced teacher in charge to advise pupils in the selection of reading matter.

A dictation class is held from 5.30 to 7.30 p.m. for those who want to keep up their speed in shorthand. This class is open to writers of all systems.

A bowl of soup is served without expense to students who desire to come directly to school from work. This saves time and money.

This is characteristic of American education as a whole. The endowed foundations are so few as to be negligible ; the schools are dependent on grants from the state or the county. The grants are given from the taxes. There is universal franchise over twenty-one, and many a local election is fought entirely on educational questions from the financial aspect. This means that the schools must appeal, for better or worse, to popular opinion. They must give what the people want. They may advertise, their President or Principal (as he often is) may be a fine public-business man and get on with the

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Rotary Club and the Councillors ; but if the school is not "a live wire ", i.e. if it is not answering the present needs of the district, it will die, or its personnel be rapidly changed. The teacher's tenure is by the term only in most states.

The disadvantages of the position are obvious. The better aspects of the result call for consideration, for in America students go back "to school" again and again through life. Does such a result justify the inclusion of millinery, publicity, journalism, short story writing, library routine, public speaking and housewifery in a degree course ? And typewriting, public speaking, library routine, and dramatic art in a High School ?

The custom in England is to laugh at the "catholic and unexcluding" nature of American education. A University which gives "credits" for skating—as one western Teachers' College does—*must*, if judged by some standards, be on a low intellectual level. Yet who would not rather know how to skate than how to find cube roots ?

To judge fairly of curricula we must look at the place education holds in national life. America loves education in a way that England does not, and the gaining of degrees and diplomas is almost a national hobby. In the more sparsely peopled districts of the "Wild West" nearly everybody, cowboy, teashop waitress and guide has a university degree or is saving up to get one. The janitor of a country school goes off and takes a vacation course in the duties of a caretaker, comes back waving a "Diploma", and entirely reforms the material side of the school. The theory is that everything that is done can be done properly, and the educational system of the country undertakes to teach people the proper way. School teaches the art of living.

The result of this, from the other angle, is that while yet at school and college, young people bring intelligence to bear upon affairs in the world at large. They realize early that daily work can be done intelligently or

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otherwise. It is to their interest that washing up, clerking, or window-cleaning should be as speedily accomplished as possible, and with the minimum of trouble. In a Teachers' College several students earned part of their living by window-cleaning in the town. They quickly saw that for each to work independently, always crossing his colleague's tracks, each carting round independently his separate apparatus was a foolish waste of time. The window-cleaners met, divided the town into districts, pooled their resources, and thus improved their apparatus and reduced their work to the minimum. Since cafés and kitchens are largely staffed by students, hours of meals and apparatus are adapted for student convenience. Here, as elsewhere in America, good results lead to excess. Americans are geniuses in perfecting time and labour-saving systems. It is unfortunate that they so often think the system enough, and lose sight of the object for which it was perfected.

Supposing, however, we accept the subjects which are generally taught at present in England, and consider them from the point of view of the time allotted to each. The subjects may be divided into groups according to their aim or character.

- (1) Mechanical English, necessary Arithmetic.
- (2) Handwork, Drawing, Music, and artistic side of English.
- (3) Physical Training, Dancing, etc.
- (4) Literature. The story part of History and Geography.
- (5) Science and scientific Geography, and Mathematics, e.g. Geometry.
- (6) Sewing, Domestic Training.

The amount of time to be allotted to these groups of subjects is not the same, nor need the same proportion of time be given to them at different stages in the school course.

For example, the first group must take up a great deal of time in the lower part of the school when children

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are learning to read and write, and to do the fundamental processes in Arithmetic. (2) and (3) are also of prime importance to the little children. (5) is only suitable for older children, and (6) is mainly suitable for the middle and upper school, the sewing of small children being of the simplest kind.

If we were to arrange the groups of subjects in order of importance for 8-year-olds and 13-year-olds, they might be as follows :

EIGHT-YEAR-OLDS

		hrs. mins.
Mechanical English	2 20 min. lessons per day ..	3 20
Necessary Arithmetic	2 20 min. " " ..	3 20
P.T. or Dancing	2 20 min. " " ..	3 20
Art	2 30 min. lessons per week ..	1
Handwork	2 hour .. " ..	2
Music	5 20 min. " " ..	1 40
Artistic English	5 30 min. " " ..	2 30
Story lessons (4)	5 30 min. " " ..	2 30
Scripture, Sewing and Nature Study the remaining 5 hours.		

With older children about to leave school, it is useless to try to extend their knowledge of mechanical Arithmetic. What is more important is that they should increase the speed and accuracy with which they can perform the operations they already know. The proportion of time given to reading and to craft may differ as between the brighter and duller children. The bright children who can profit from book-learning may well give much more time, and in much longer periods, perhaps of 45 mins. or an hour to Literature or History. They will also give more time and in much larger wholes, to practical work than did the younger children. They will spend half a day a week in the domestic science room or the wood or metal work shop ; they will practise one or more crafts in periods varying from an hour to $2\frac{1}{2}$ hours. The older children who do not learn easily from books, and who find their satisfaction more readily in doing things with their hands, will give less time to book-reading in Literature and History, and more time to craft and to practical training. All older boys in

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good modern schools do gardening. The older children also give longer periods to Science, and have one long period a week for Organized Games.

The balance of the curriculum, therefore, varies with the age of the children, and also with their mental abilities. In a large good school one expects to see an appreciable difference in the allotment of the time as between the different "streams", as well as a difference in the syllabuses of the same subjects taught to children of different abilities. These differences of syllabus sometimes make any one subject something quite different from what it might appear to be on the time table. Thus in the "A" stream, the History lesson on, e.g. Drake, might consist in the teacher telling the story of his adventures, and then of the children reading a chapter for themselves and looking at pictures. In the "C" stream the same topic might occupy twice or thrice the time it takes in the "A" stream, and consist very largely of the children looking at models and pictures, and making perhaps, models of Tudor houses, etc., hearing the story more than once, acting parts of it, talking about pictures of ships, and so on. It would be difficult to say whether the lesson should be called English, History, or Handwork !

The motives for the variations in the amount of time given to the different groups of subjects can be easily understood. The importance of mechanical English and necessary Arithmetic in the lower part of the school is too obvious to be insisted on. Next in order of importance comes Physical Training and Dancing, and here again the importance of the subject is clear. The third group of subjects is the artistic, and it is of particular importance that children should be familiarized with them when young. Music, Handwork and Drawing train sense perception and are thus useful in providing children with the raw materials of much future enjoyment and knowledge, and this training of the senses is most easily done, and is most fruitful when children are young. In

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the second place artistic creation, in Drawing, Poetry, or other forms of art, requires a certain frame of mind. This attitude is hard to describe in words, but the essence seems to be a suspension of the critical faculties, and a detachment from one's immediate surroundings coupled with an unusually eager mental activity. This attitude is quite different from that ordinarily cultivated in school. The boy learns to criticize his every word and action, viewing it from the master's standpoint. He learns to remain alert, bound to the reality of the moment. Therefore when older children are asked to write verse they are apt to produce metrical exercises devoid of any poetic thought or feeling. With smaller children the difficulty is far less. They have not been so well drilled into the school atmosphere ; poetry and art come more naturally to them, and, if they learn early to catch and control the mood of appreciation or creation, the experience is an acquisition for life.

Higher in the school the subjects which teach interesting facts, History, Geography, Science, can hold a far larger place. The children are now old enough to understand them and the facts as taught can bear some reference to the truth of things. They therefore can now receive a real place in the curriculum.

There is another point from which the curriculum may be considered. So far, the subjects have been taken separately, but should there not be some connection between them so that the total effect is one of unity rather than diversity ? This theory has been the subject of endless discussions under the names of "correlation" and "concentration". Correlation means the connecting up of the different subjects by means of some common thread running through them all, and was most extensively popular in the infant school. Many are the stories told against the method, which is as easy to ridicule as any other educational fad. It is said that children were asked to look at snowdrops in the garden, dissect them in Nature Study, draw them, hear stories

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about them, sing about them, and play at being them in Physical Training. The result was that they hated snowdrops. In other cases a book was made the centre, and the following scheme, which hangs framed and illuminated in a certain London class-room, illustrates both the industry of a former teacher and a past state of mind.

AN EXAMPLE OF CORRELATION ROBINSON CRUSOE

<i>Story</i>	<i>Nature of general information</i>	<i>Geography</i>	<i>Painting and drawing</i>	<i>Paper work</i>	<i>Clay modelling</i>
The Wreck	Wind and waves	High and low tides	Rocks and sea, Crusoe's ship	A boat	
Desert Island	Islands we know, Gt. Britain, Isle of Wight	What an island is	Sea and islands Palm trees	Palm trees	An island
Tour of whole island	A Parrot	Mariner's compass	Points of compass	A weather-cock	Compass in box

(These are only samples.)

Concentration, the grouping of all lessons round a central idea, likewise became stupidly artificial and ineffective. A teacher in an infant school was found giving a lesson on *Thankfulness* at 3.30 on a Friday afternoon. Asked why, she replied, "Oh, please, we were supposed to be concentrating on Thankfulness this week, and I've only just managed to get it in!"

Correlation never went very far up the school ; its deficiencies were too obvious and the tax on the teacher's ingenuity too great. It has perished, but left a successor.

The successor to correlation is a device known as "Projects". It is most fashionable in the infant schools, but has often proved more successful and useful in junior and in senior schools. The underlying idea of a Project is that it projects a purpose, which should be

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the children's own, and in the carrying out of which they learn much. In the infant school, for example, the children might be taken to visit a Post Office. It is natural for them to want to make a Post Office—which they do in school after their visit. They make a counter, a grid, pillar box, cash box, etc.—in their own way, and from such materials as may become available. They want to write and post letters and postcards, sell and buy stamps, put up notices, etc. And to do this they want to learn to read and write and count and recognize money. So that in carrying out the purpose which they have proposed to themselves they learn much Handwork, three R's, and incidentally, to plan, think and organize their own work and time.

In the junior or senior schools, a Project might take the form of an entertainment which one class wants to give to another class, or to parents. That would involve making posters, tickets, costumes—perhaps writing a play or even tunes and verse, calculating costs and doing accounts and so many activities would be brought together in one purpose.

Sometimes projects in senior schools are ambitious and may include running a "Calf Club" or a "Pig Club,"¹ or building a sports pavilion. A good garden is often a "project", and the decoration and furnishing of a prefect's room in the Housewifery Flat, or the soft furnishings in the mistresses' room might be projects undertaken by older girls.

If done sincerely and sensibly, the project idea is very helpful. It gives reality and flexibility to work, which, if left within the water-tight compartments of subjects, may become unreal and rigid. When it is used as a stunt, or in mere imitation of a method which someone else has used sensationnally, it leads, like correlation, to the silliest situations, and "projects" are attempted which have no reference whatever to the children's own purposes, and in which the teacher's standards and

¹ *Education for Life*, Matthews.

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ideas alone are expressed—and in which, not infrequently, the teacher has done most of the work.

A later chapter will suggest another method of getting rid of the barriers between subjects.

QUESTIONS FOR DISCUSSION

- 1.—What exactly do you think you are aiming at when you teach children History or Geography? How should such aims affect your choice of matter and method?
- 2.—Draw up the curriculum you think most suitable for any given standard in an elementary school and justify it.
- 3.—Suppose you had a private school of your own and plenty of capital behind you, what would you teach your children, and why?
- 4.—Can you see any use for correlation in schools? If so, what?
- 5.—Is the charge that elementary schools are one of the most conservative institutions in the State justified, from the point of view of the curriculum? If you think this charge true, can you suggest any reasons for the fact?
- 6.—In what senses is the elementary school curriculum a "preparation for life" for the girl who marries a mechanic earning £3 a week? The girl who becomes a domestic servant? The girl who will work 8 hours a day at a purely mechanical job in a factory? The boy who will emigrate at 16 to Canada? The boy who will become a clerk earning £2 10s. a week?
- 7.—What value have the Arithmetic, the Handwork, and the Composition lessons which you attended in the elementary school been to you, beyond the value they might have had in getting you to a secondary school and college?
- 8.—Show how you would adapt a curriculum to suit (a) a small country school where it is difficult to procure books; (b) a slum school near the docks in London; (c) a good-class neighbourhood where the children are all in comfortable circumstances.
- 9.—If you could plan your own education again, in the light of your experience, what would you have prescribed for yourself from the ages of 5-14 years?

BOOKS

Historical

- CATHERINE DODD, *The Farthing Spinster*. A charming novel showing what a girl learnt about 1850.
- T. H. HUXLEY, *Lay Sermons, Addresses and Reviews*, ch. i., iii., iv., v., vi. The fight for the introduction of science into schools.
- T. ARNOLD, *Miscellaneous Works* (1845), ch. vii., viii. The old public school curriculum.
- M. ARNOLD, *Reports on Schools*. The old elementary schools.

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General Discussions

KENNETH RICHMOND, *The Curriculum.*

CATHERINE DODD, *The Child and the Curriculum.*

J. J. FINDLAY, *The Foundations of Education*, vol. II. The Practice of Education.

HILDA GULL, *Projects.*

A. A. MATTHEWS, *Education for Life.*

Criticism

EDMOND HOLMES, *What is and What Might Be.*

N. ALDERTON PINK, *Procrustes : or the future of English Education.*

BERTRAND RUSSELL, *On Education.* A particularly interesting book because of the literary and philosophic eminence of the author.

American Methods

JOHN DEWEY, *School and Society.*

KATHERINE ELIZABETH DOPP, *Place of Industries in Elementary Education.*

ORGANIZATION AND CLASSIFICATION

DURING the last ten years the face of public elementary school education in England has changed so rapidly and extensively that it is necessary to describe it in general outline before we are able to consider intelligently the work that goes on in the schools.

In 1926, the Consultative Committee of the Board of Education, presided over by Sir Henry Hadow, published its report, "The Education of the Adolescent", which became known as the Hadow Report.

The most fundamental recommendation and the one which has been most influential in re-organizing the schools, was that there should be a break for all children in their education at the age of eleven years, and that then all should be drafted on to post-primary schools of varying kinds according to their capabilities and abilities. The intellectually minded would go to secondary schools, the practical minded with a capacity for technical work to technical schools (then or a year later); others would go to selective central schools, trade schools, or non-selective "modern" schools. But for all there would be provided the appropriate post-primary education.

"There is a tide which begins to rise in the veins of youth at the age of eleven or twelve. It is called by the name of adolescence. If that tide can be taken at the flood, and a new voyage begun in the strength and along the flow of its current, we think that it will 'move on to fortune'. We therefore propose that all children should be transferred, at the age of eleven or twelve, from the junior or primary school either to schools of the type now called secondary, or to schools (whether selective or non-selective) of the type which is now called central, or to senior and separate departments of existing

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elementary schools. Transplanted to new ground, and set in a new environment, which should be adjusted as far as possible to the interests and abilities of each range and variety, we believe they will thrive to a new height and attain a sturdier fibre."¹

The report and the terms of reference envisaged the raising of the school age to fifteen, so that in the "modern" schools there would be a full four-year course.

For the vast majority of children, the "break at eleven" means the transference from the junior school to the non-selective modern school. Roughly eighty per cent. of the children who start in the elementary infant schools, pass on to the non-selective "modern" school at eleven. For the present, therefore, we can neglect the other forms of post-primary education; and indeed, we are not concerned in this book with secondary, technical or trade schools.

By March, 1934, the majority of areas under Local Education Authorities were "re-organized", partly or wholly, in the Hadow sense, i.e. the children were grouped for primary and post-primary education into infant and junior schools on the one hand, and "modern", or as they now came to be called, "senior" schools on the other. It is this "re-organization" which has so changed our public elementary school system.

In a re-organized area the picture of the elementary school system is of children in infant schools up to the age of seven years, in junior schools to the age of eleven years, and in senior schools until they leave. The school leaving age will be raised to fifteen for all children from 1939 onwards, unless they are allowed to leave at fourteen by special permission to take up "beneficial employment". It is to be hoped that, as was the case with the old "labour exemptions", parents will gradually come to regard exemption for employment, however beneficial, as something not to be sought except in very necessitous cases.

¹ *The Education of the Adolescent*, p. xix.

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Children may enter the nursery class of an infant school at three, if there is a nursery class in their area. They must attend school in the year they are five. They therefore spend about two years or more in the infant department, four years in the junior, and will ultimately spend four years in the senior department.

In a town area departments are generally fairly large, and sufficiently close together for children to be grouped in economic units. If an Authority were building and planning from the beginning, and had a clear field in which to work, it would probably arrange its schools so that the flow of children from the infant schools to junior and thence to senior schools more or less exactly filled the schools. Suppose in a section of a city there were 300 children in each age-group, the Local Education Authority might then build two infant schools each for 300 children. From these two schools together about 300 children would leave each year. These would pass to junior schools for boys and girls. There might be one junior school for boys of 600, and another for girls of 600—or there might be three schools each of 400 and each for boys and girls—or perhaps four schools each of 300. From them every year about 300 children would leave. Some would go to secondary or perhaps central schools, and the rest, i.e. about 240, would pass into the senior schools, i.e. 120 boys and 120 girls would enter the appropriate senior school each year. This size of entry is a very convenient one. It means that in each year of the course there can be three classes, each of about 40. The whole school would therefore consist of nine classes (360 children) if the course lasts three years, and twelve classes (i.e. 480 children) if the course lasts four years. A senior school of this size can be run very well by one Headmaster or mistress, and is the most economical size in building and upkeep. It also has very great educational advantages as will be shown later.

But in practice, except in new housing estates, an Education Authority cannot begin in a clear field. It

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has to use the buildings already in existence and it has to deal with areas in which the population is too small or too scattered to be grouped in ideal units. The usual procedure has been to use the older buildings for infants and juniors, and to build new senior schools. The removal of the over-elevens from the older buildings has often left sufficient space for halls to be made where there were none, and, if sanitation and cloak-room accommodation are brought up to date, the large rooms which were built to house ninety or more children in the old days, serve very well as class-rooms for the modern classes of fifty. Many teachers prefer them to the newer, smaller rooms.

Also, the size of infant and of junior schools cannot always be decided ideally. But wherever it is possible to arrange it, the senior schools have been planned as schools for 120 children at least, or for 240, 360, or 480. Children are often gathered up from several junior schools to enter one senior school and if necessary are transported several miles by bus every day. It is not unknown for one senior school in a country area to take children from twelve or more contributory schools, and for these children to be brought to school daily and dropped at various points on the way home by a small fleet of buses hired for the purpose by the Education Authority.

The reason for this insistence wherever possible on larger groups of children, especially for senior schools, is that it is only when children are gathered together in sufficiently large numbers that they can be sorted out according to their abilities, into groups large enough to form a class. Thus, if there are 120 children in one age-group, it is possible to group them in three classes of forty on a basis of intellectual ability. If the age-group, or size of entry is only eighty, there can be only two classes, and the classification must therefore be rougher. If there are only forty entering every year, there can only be one class for each age-group. That is why a school

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of a total size of only 120 (i.e. three classes for a three-year course) is so unsatisfactory.

These classes based on ability form through the school what are now known as "streams". The brighter children form an "A" stream, for example, the average a "B" stream, and the slower a "C" stream.

Classification into "streams" also takes place in junior schools if they are large enough. It is of great help to the children and to the teachers, for instead of having to provide for children of the whole range of ability from those who have just missed scholarships to those who perhaps should be in a school for mentally defectives, the teacher can frame his curriculum and syllabuses and time table more in accordance with the special needs of the children he teaches. It is obvious that in many ways a course planned for "A" children will differ in balance of subjects, allotment of time, and in method from one planned for "C" children. Generally speaking, "A" children can learn more quickly, and can learn more easily from books and through language than can "C" children. The latter are not only slower to learn anything, but their method of approach is generally quite different from that of the "A" children.

It is now possible to frame differing courses which fit the children's ability more nearly, and in which, therefore, a "C" child may be as successful in his course as an "A" child is in his.

One of the most noticeable effects of re-organization has been the prominence it has given to the problem of dealing with the slower children. In the older all-standard schools, there was always a handful of children who were too dull or too slow to profit by the education provided for children of their own age. They were just left in a lower standard—generally standard IV—and there did the same work year in, year out, until they left. It was no one's business to think of their special difficulties or to attempt to provide an education suitable for them.

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Under "re-organization", these children are brought together in sufficiently large numbers for their case to be realized as an important one. It is significant that Head teachers of senior schools are always commenting on the "backwardness" of a third of their scholars. But it now should be possible to deal with this problem in a more intelligent and effective way than was possible previously. Generally speaking, the attempts made up to date to deal with these children have lain in the direction of giving them more rhythmic movement and more practical activity of every kind. The book-learning has been reduced and facts are presented to them in as concrete and definite a form as possible. Wherever possible the numbers in these classes are reduced ; and where a class can be kept down to twenty-five or under, much more effective work is possible, since only then can *individual* needs be provided for.

Another reason for trying to keep the senior schools in reasonably large units is that only in buildings of a certain size is it reasonable to make all the provision that is now demanded. For re-organization is based on the belief that children who are not of the "secondary" school type need opportunities of a different, but no less stimulating and valuable kind for their full development. They need opportunities for practical work and for physical activities.

"We recognize", says the Hadow report, "that much depends on the nature of the new ground and the quality of the new environment. . . . The senior departments . . . will give a humane and general education. It will be shorter in its duration : it will terminate at the end of three or four years ; but it will be directed, while it lasts, to the fostering of mental power. Two methods, which will differentiate them from secondary schools, will generally be followed in central and senior departments. One will be the method of manual work and practical instruction, on which we set high hopes, believing that there are many children who think, as it

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were, with their hands, and will profit greatly by a method of instruction which follows the natural bent of their capacity. Another will be the method of giving a trend or bias which we may call 'realistic' to the general course of their studies."¹

This means that in every large senior school there should be two practical training rooms (for Domestic Science and for Woodwork or Metal Work), three or four large rooms for Arts and Crafts, and a Science room. There is a Hall, and in the most recent schools gymnasia with changing rooms and shower baths are being built. Provision of this kind is expensive and is difficult to make for small numbers of children.

We have spoken of *courses*—of three- or four-year courses in senior schools, and of four-year *courses* in junior schools. This implies that classification within the school will be as nearly as possible on an age-basis. Where the school is large enough to allow three or four streams, an age-basis classification is essential. Courses are made to fit the children they are intended for. There is no ideal of what "a child" of eleven ought to know. Children vary according to individual ability and according to locality. The head and his staff have every chance now to consider what is the best kind of experience for groups of children in each year, and to see these experiences as forming part of a continuous course which the children in the various "streams" can complete. Within each class there may, of course, be groups for such subjects as Arithmetic, and the class course may be modified for each group.

Unless a child passes on, year by year, through the course provided for him, there must inevitably come a big gap when he has to leave the junior school at eleven, whether he has completed the course there or not. If the area is well organized and the junior and senior schools working in close co-operation, as they should be, then the transition from the top of the junior school to

¹ p. xx.

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the bottom of the senior school is made easy. A "C" child from the junior school passes to the "C" stream of the senior.

But it is very often found that the stimulus of going to a new school with different teachers and new activities has a beneficial effect on children. It is rare for a child to suffer in the transfer.

But re-organization is still incomplete, and where complete in material matters it has still a long way to go in educational ones. The problem of dealing with the slower children has been mentioned. We have still to learn to evaluate more truly the different activities included in the senior school curriculum. Are we overdoing the craft idea? Ought Domestic Science to be begun at eleven, or twelve? Is it desirable to include a foreign language or commercial subject for the "A" children? It is to be hoped that the senior school will remain free from external examination—but even this may be in doubt.

And no mention has been made in this chapter of selective central schools. These are popular in London, but probably in few other places. The method of selection is generally by the same examination which is used for selection for secondary schools. The children who do not get enough marks for secondary free places go to central schools.

In many areas central schools have become ordinary non-selective senior schools. Where they do still exist, as distinct from the senior schools, they are intended for children who do not go to secondary schools, and who show capacity for book-learning. They generally develop a commercial bias, and some imitate secondary schools and take school certificate examinations.

QUESTIONS FOR DISCUSSION

- 1.—Compare the elementary school which you attended with the re-organized elementary school that you experienced in school practice.

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- 2.—Try and discover on what basis, or by what test, the children are sorted into the "A", "B", and "C" stream. What do you consider the success of the classification?
- 3.—Try and see what individual records of individual children are kept. What records *do you think* should be kept?
- 4.—Compare carefully the scheme in any one subject, e.g. History and Arithmetic, of the "A", "B", and "C" stream. On what basis do you *think* the differences are or should be made?

BOOKS

H.M. STATIONERY OFFICE, *Education of the Adolescent.*

H.M. STATIONERY OFFICE, *Elementary School Buildings.*

AESTHETIC EDUCATION: I. ART

"For those that like this sort of thing, this is the sort of thing they like."

PERICLES, prime mover in one of the most famous outbursts of artistic activity in the history of the world, summed up the place of art, as he understood it, in national life.

"We have not forgotten to provide for our weary spirits many relaxations from toil: we have regular games and sacrifices throughout the year; our homes are beautiful and elegant; and the delight which we daily feel in all these things helps to banish melancholy."¹

That is all: and yet in a city harassed by war, and permanently short of money, he lavished the national resources on the building of the Parthenon, the great propylaea and the glorious statue of Athena in ivory and gold. These works, it is true, had a political as well as an artistic significance; but the spirit they implied was woven into every strand of an Athenian's life, and the bowl from which he drank his wine was as beautiful in its own way as the statues of his athletes or the temple in which he sacrificed to the deity.

Among all the activities of life the artistic holds the most curious place. It must be ranked low if we see in man's activities simply a means of earning a living; and even if we admit its power to please, and cultivate it for that, it is hard to say exactly what satisfaction we derive from it. Our loves, and our desires can be satisfied, and the resultant satisfaction is strong and easily comprehensible, but what is the movement of pleasure with which we regard a picture, or listen to music? What real difference does it make to our appetite or enjoyment

¹ Thucydides, Book II, 38. Jowett's translation.

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of dinner if our china is real Worcester or an ugly imitation? Yet intangible as the satisfaction which art gives may be, it is very real, and the lack of beautiful objects in our daily life may produce a sickness of spirit which rapidly manifests itself, in many people, in decreased physical well-being.

Plato, of course, knew this, as he knew most things.

"Good language", says Socrates, "and harmony and grace and rhythm depend on simplicity—I mean the simplicity of a truly and nobly ordered mind, not that other simplicity which is only a euphemism for folly."

"Very true," he replied.

"And if our youth are to do their work in life, must they not make these harmonies and graces their perpetual aim?"

"They must."

"And all life is full of them, as well as every creative and constructive art—painting, weaving, embroidery, the art of building, and the manufacture of vessels, as well as the frames of animals and of plants; in all of them is grace or the absence of grace. And absence of grace and inharmonious movement and discord are nearly allied to ill words and ill nature, as grace and harmony are the sisters of goodness and virtue and bear their likeness."¹

It may seem to be applying the sublime to the trivial, but the manners of tram conductors in different localities correlate so closely with their surroundings that it is hard not to believe that Plato is to be taken literally even to-day!

But, whatever may be true of manners, the love of the beautiful is not merely an external accomplishment, such as the power to recognize whether a picture is a genuine antique or not. It is something which pervades a whole life and character and determines a certain type of thought and behaviour. It is also a source of steady pleasure if circumstances admit. The dweller in any

¹ Plato, *Republic*, Book III.

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city which possesses parks, rivers, or access to open and natural country can go and look at it, and be eased, gently, almost imperceptibly, of the irritation which bricks and mortar produce. The Londoner can loiter on one of the Thames bridges or watch Whitehall dissolve into a lamp-engoldened mist. These pleasures are cheap and the more one seeks them the more they can be found. Beauty perceived by the other senses is less constantly available, but gramophones have brought us a fair imitation of good music, and books are available in libraries. Smell and touch we largely ignore as artistic mediums, though there is no real reason why we should. A ride through South-East London on top of a bus, if taken solely as an experience in smells, can be most interesting and almost delightful.

A poet has summed up the distaste which the sight of a refusal to accept natural pleasures produces in one who knows and appreciates them.

Oh, fat white woman whom nobody loves,
Why do you walk through the fields in gloves
Missing so much and so much? . . .

The man who walks in shoes on sand, on a sun warmed tar road, or among cool grass, remains similarly ignorant of elemental pleasures.

A small child of eighteen months or less uses all his senses for receiving pleasure that might be called aesthetic. One day a little boy of this age found a box of coloured counters and was charmed with them. He called them his " pretties ", using the word as a noun, and expressed his delight in them every time he was given the toy. The same child from a still earlier age liked music and would pull himself up on his feet by the furniture—it was before he could stand alone—and " dance " to the tune until his little legs gave way and he sat down. He also stroked fur and said " pussy " with every sign of satisfaction ; the smell of flowers he liked and was particularly devoted to scented talcum powder. Here there seems to be aesthetic enjoyment

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from all fields open to him. Children very rarely fail to respond to good clear colour or design. Some primitive peoples invent beautiful designs for their huts, rugs or coverings and utensils. Such are those of the American Indian—far superior to the over-elaborate self-conscious taste in many American houses. Education must aim at developing children's natural good taste, and must avoid corrupting it, as the American schools corrupt the taste of the Indian by making him draw sunflowers in pencil, and thatched cottages, that he has never seen, in dirty pastel.

Adult convention limits this wide field. Pleasures from the ear and eye are legitimate sources of aesthetic satisfaction, to desire pleasure from the other senses savours of sensuality. Touch, taste and smell are stigmatized as the *lower* senses and we are assumed to descend to the animal level when we enjoy them. It is true that their enjoyment is often connected with excess. Pleasures of taste may lead to gluttony, or those of touch to sybaritism, but this is not necessary. What is required for all the senses is a refinement and increased sensitivity combined with an element of intellectual construction. This is especially obvious in the most cultivated senses and in relation to the best established arts—music and painting. No one can be a good musician, or even a passable critic who has not developed his discrimination of sounds beyond the ordinary. So, too, with the other senses delicate discrimination leads to the discovery of pleasure in places where it is generally overlooked. A small child likes his colours bright and plain. He can understand them so. The artist can be moved to pleasure by the varying shades of grey in a London fog ! The Embankment in November can be a wonderland of beauty for those who know what to look for and how to discriminate what they see. In touch again the most interesting and delicate sensations are supplied by the air against the exposed parts of the skin. Most people notice the cruder cases of this, as when a

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strong wind blows in their face, few analyse and enjoy the difference between the W. and the S.W. wind or the S.W. and the S. Again, one of the greatest pleasures of travel is the experience of different "airs"—the dry or wet, hot or cool.¹ With this touch sensation, smell is closely connected. The winds of England not only have their own temperatures, moisture, or strength, but they bring their own smells. The dweller in a town is hampered in this particular appreciation, but in compensation he has the smells of different districts or houses, and the traveller has a wider field still of interest and discovery. This appreciation of sensation passes from the raw material to art itself when it is given intelligible form.

The primitive aesthetic enjoyment of life is far wider than "art" as understood in schools, but the school can do much to increase and train it. With small children sense training lessons on the Montessori method develop an interest in the special senses. With older children casual remarks, or even definite teaching, can lead people to an appreciation of natural beauty. Stevenson's poem, *The House Beautiful*, suggests a line of thought that could be expanded and applied to any district :

A naked house, a naked moor,
A shivering pool before the door,
A garden bare of flowers and fruit,
And poplars at the garden's foot ;
Such is the place that I live in,
Bleak without and bare within.

Yet shall your ragged moor receive
The incomparable pomp of eve,
And the cold glories of the dawn
Behind your shivering trees be drawn ;
To make the earth, our hermitage,
A cheerful and a changeful page
God's bright and intricate device
Of days and seasons doth suffice.

In the case of other senses a mere suggestion may be enough. The smell of washing day, with its steam laden

¹ Milton was especially sensitive to different airs.

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air and the odour of soap, is delightful when once its attractiveness has been pointed out ; so is the smell of floor-polish. The scent of good newly-made China tea is without compare, even the odour of boot blacking has its merits. Custom, and a sense of the subject matter being inferior hinder the appreciation of these things in the ordinary way ; and a teacher who is anxious to lead her pupils to the greatest enjoyment of life should take care to dissipate the prejudice.

When we pass from an appreciation of nature to that of art the problems are different. The essential difference is that the natural object speaks for itself and appeals directly to sensation. All the teacher can do is to direct attention to it ; the work of art involves other considerations.

If the traveller on a bus is not pleased by the view from Battersea Bridge up the curving river, with its strings of barges, and the towering chimneys of the Lots Road Generator, he is not pleased, and that is the end ; if the same traveller fails to get any satisfaction from Blake's drawings in the Tate Gallery he can be argued with, shown the suggestive force of line or shape, made to take an interest in the technique or colouring and asked to consider the meaning. For art is a far more intellectual matter than an appreciation of nature, and for full enjoyment needs to be understood as well as seen. Certain people even intellectualize their appreciation of nature by thinking how it could be translated into art. Such people on Battersea Bridge cannot help noting how interesting are the varying curves of barges, bank and water, and what a wonderful value is given to the dim greys and yellows by the little group of white swans in the curve of the North bank. This mode of approaching nature obliterates the distinction between the appreciation of it and of art, and it is on the whole an advantage to cultivate it. It enriches the enjoyment that comes direct from the senses, and nature is with us more continually than are pictures.

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On the other hand some appreciation of art is as unintellectual as that of Nature. There are many people who "like a thing without knowing why they like it". Probably that is a necessary first step in all appreciation, and the state which is the true basis of the aesthetic experience. The baby with his "pretties", smiling with pleasure at the sight and touch of them, is not analytically minded, nor is the child of ten or eleven who looks at pictures or who enjoys singing "Barbara Allen". Verbal, critical appreciation must come with knowledge of technique and with a share in aesthetic creation.

The satisfaction derived from aesthetic appreciation is not a mere external luxury but bound up with the deepest parts of our nature, and is, for most people, an integral part of a happy life. If that were all it would be important, but it is doubly important because it is so closely connected with the impulse to create. Mere passive appreciation of beauty rapidly passes over into a desire to *make* something beautiful, and the things that we make we make beautifully to the best of our ability. Moreover, it is through the arts that, in school at any rate, most people definitely taste the joys of the higher forms of creativeness. The part which these joys play in many lives cannot be overestimated, and it is one of the most hopeful tendencies in modern education that this is being realized. Of our greater schools, Oundle set the example in this ; and the following extracts from a sermon by Sanderson show clearly the part which he felt creation should play in school work.

"Day by day, step by step, stage by stage, in the order of creation, in the evolution of making of things, in the preparing and coming of things, a day's work is before us, and a day's work is done. The day comes to each of us, before us is what we have to do towards fulfilling our part in the great creation which is proceeding. To us is given day by day, more clearly than before, what we have to do—and what a mighty influence for good in life if we can say, 'There was evening and

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there was morning and the day's work is done, and behold, God saw that it was good.' Such a vision and purpose of life comes when we are always creating, making, developing, discovering ; always have in front of us something to attain to, some new venture, something on before. . . .

"The fundamental instinct of life is to create, to make, to discover, to grow, to progress. Everyone in some form or another has experience of this joy of creating ; the joy of seeing the growth, the building, the change, the coming. . . .

"Life, this beautiful, creative life, comes slowly through the ages, but it comes. Slowly mankind is emerging out of slavery into the beautiful freedom of creative life. Slowly mankind is realizing the natural desire, the instinctive natural urge, the essential need for life—of each individual to be free. Free, that is free to strive, to endeavour, to reach onwards, to create, to make, to beget. . . ."

Sanderson showed how this creative spirit could be used in all departments of school work, but in particular in Science. Faraday was one of his heroes and he reverenced him for his marvellous powers of scientific discovery and his deep piety. Creation in Science, whether a man is working to discover the answer to a problem, or to make an object according to principles already known, seemed to him both an exercise of the faculty of creation and an act of social service deriving its sanction from God, the Creator, Himself. This principle was extended to other branches of school work, and the same spirit of investigation and creation vitalized subjects such as History or English.

The average school has not the equipment, nor the technique which will enable most subjects to be taught in this way, and it is through the artistic subjects that children have their experience of creation in school. The inclusion of the creative arts in education has meant in many cases a great increase in the hold which a school

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has over the minds of its pupils. About 1908, say, many secondary schools for girls offered nothing but academic subjects, a little barren drawing, and a little still more barren needlework. The result was that children in whom the impulse to create was strong satisfied themselves out of school, by dressing dolls, making objects in wax, plasticine, or clay, writing and acting plays, digging a garden, composing and duplicating a family magazine, and so on. School became a thing to be got through in order that they might return to their really important activities. There is a great deal to be said for this preponderance of out-of-school activities, but if the schools want to keep the interest of their pupils and be a real factor in their lives they must make this creative work a regular part of the training. In the teaching of art in schools this factor should never be lost sight of, the more so that the practice of an art is one of the surest roads to a just appreciation of the work of others.

From the educational point of view the appreciation of art can be considered apart from its practice. One does not come before the other, and each affects the other, but the educational methods and opportunities vary. In many schools the introduction of aesthetic appreciation is not easy. The buildings are old, dirty, and built on a plan that renders decoration difficult. Windows are so high that flowers are out of sight when placed on the sills. The walls are cumbered with cupboards or are glass partitions between one room and the next, and thus there is little opportunity of hanging pictures ; desks, tables, paint, blackboards, chalk, all suggest school in its most repulsive form ; the spirit even of the enthusiast is broken. On the other hand some schools are fortunate in their architect and their caretaker, and the teacher has opportunities to beautify them which should not be missed.

The two forms of decoration most suitable and convenient are flowers and pictures. One class-room,

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in an otherwise dingy school, always has a little table specially reserved for flowers. The children have bought or collected small glass vases, and several girls have one each which they keep supplied from their own gardens or those of their friends. Late into September there are a rose or two, later a handful of coloured leaves, primroses in the spring. The smallness of the vases prevents the crude stuffing of large bunches into any convenient jam jar, and the girls take great pride in tending their own particular pot. There is no reason why almost every school should not have at least this much decoration.

Pictures present a difficult problem. They are generally expensive, and therefore are often expected to serve a didactic as well as a cultural function. School pictures therefore often represent bees on thistle blooms, or Harold perishing at the Battle of Hastings ; and these works, though quite possibly useful for illustrating a Nature Study or History lesson, are devoid of real artistic imagination or insight. In fact to look day after day at a row of history pictures is to find oneself slipping from artistic contemplation to mere quibbling. Does that man with the axe think he is going to cut the spear in half or did the artist make a mistake in the drawing ? —is the centurion on the Roman wall going to slip over the edge or does he know how near to it he is ?—and so on. The pictures do not provide the proper material for thought, the eye is not led round from point to point and enabled to enjoy the composition, there is no problem of technique, no suggestion of atmosphere and life. If pictures with a certain didactic use are needed it is far better to have the excellent railway posters which can be bought from the termini and which in many cases are the work of first class artists and possess the highest merits as class-room decoration. They are also cheaper and can be changed more often. Other " didactic " pictures should be kept out of sight, except when being used ; as the Board of Education rightly suggests.

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The teacher should aim at having pictures to illustrate his History or Geography, but these should not exclude pictures which have a purely aesthetic value. The choice of these should probably be in various hands. Each teacher might choose one as grants came round ; since, though we each think our own taste perfect, all do not agree with us, and, if several choose, the result will be more diverse and interesting than if all the pictures were the choice of a single person.

It is sometimes assumed that pictures for schools should all be "classics". Whatever may be the value of antiquity in wine, it is doubtful in art. Children are not archaeologists and they like to be spoken to in the language of their own age. Modern art, except perhaps the most modern, is more comprehensible to the child than the ancients, however interesting. Botticelli irritates by his peculiarities in drawing ; Titian, unless extremely well reproduced, loses his chief charm with his colouring ; Raphael alone is perhaps universally appreciated because of his easily comprehended sentiment and his tender drawing. But even so not all his works are suitable. The English child, and indeed many adults, have no conception of the architectural use to which Italian paintings were put. They do not realize that they were designed to fill wall spaces of a certain shape and size, and not to occupy a rectangular frame. Many of Michael Angelo's drawings cause endless bewilderment by their irregular shape, or by including an apparently irrelevant arch or grating. Among artists of the past Greuze is almost as universally acceptable as Raphael, and for the same reason ; but portraits of duchesses and ladies by Gainsborough or Lawrence carry no conviction or meaning to most children.

It is hard to judge whether pictures with landscapes or those with people give more satisfaction. It probably varies from one person to another. It is best therefore to have some of each. But a picture with figures ought to be more than a portrait. It should contain a story

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or an idea. To take pictures which are very common in schools, Raphael's Sistine Madonna, and "When did you last see your father?" are better pictures for children to look at than Holbein's portrait of Henry VIII or Leonardo da Vinci's Beatrice D'Este. If pictures with people afford food for thought, landscapes provide an escape from the walls of the building and open the way to lands of memory or imagination. Here, too, a clearly comprehensible emotional tone is a great aid to appreciation and such a picture as Ernst Dörn's Abendstille more than makes up by its suggestion of space and peace for what it loses in precision of drawing. This is not, however, any excuse for many of the quasi-landscapes that are common in schools. In these the seasons are represented in a drawing convention which deprives them of verisimilitude, and in a flatness of colouring which is most depressing. The fact that a picture is in an educational dealer's catalogue is no reason for buying it. In fact it is almost a reason for not buying it. Pictures in school should be a training in appreciation which may guide the choice of pictures in the home, and no sane man buys those from such a source. Moreover the pictures in school should be good. No reputable artist allows Messrs Blank of Preston to reproduce his works. The Medici Society or some other firm with adequate plant and a really skilled staff does it. And yet further, publishers' ideas of what pictures are suitable for schools are so deplorable, and represent the views of so long ago, that it is extremely rare to find even a possible picture in their lists.

The most modern art of Epstein or Roger Fry, of negro Venuses and green nudes, presents an educational problem. Children will appreciate the great bulk of the work reproduced in such a periodical as *Colour*. They will refuse the minority of pictures which are a more or less definite distortion of nature. There is no harm in letting children see these pictures, they are part of the art of the day, and are a factor in national life.

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They may contain elements which will have a permanent effect on art, and it is no use educating our children in the art which was revolutionary fifty years ago, and ignoring the progressive tendencies of our own day. It is another thing to buy large pictures of this type and exhibit them permanently on the walls. Their proper place is in the books of pictures—such as bound annual volumes of the *Studio* or *Colour*—which every school should possess in exactly the same way that it possesses anthologies of poetry. If it is good for a child to turn the pages of a book and read poetry, it is also good for him to turn the pages and look at pictures ; the pleasure and the benefit in both cases being much the same.

Many schools show the most complete contempt for pictures. In one, well known to the writers of this book, out of the some twenty pictures, most of them bad, which the school possesses, ten are hung in the class-rooms, all so skied that the children cannot see them, one decorates the headmaster's room, and the rest, including the only really good picture of the lot, stand *face to the wall* in a disused staff room.

There is also a tendency in class-rooms to hang the pictures on the wall facing the teacher, so that the class cannot see them without turning round. It is pleasant for the teacher to have something to look at, but it would be just as pleasant for the class ; and all the available space behind the teacher need not be occupied. The blackboard takes part, but why need an unsightly cupboard take the rest ?

Pictures and flowers are not the only objects of beauty that can be contemplated in school. William Morris demonstrated that all objects of household use could be so made as to be beautiful. A school should arrange for exhibitions of beautiful pottery, dresses or even furniture. If it cannot manage to have these things brought to school, it should take parties of children to exhibitions, to look at the objects, and explain the elementary principles of design or technique in precedent

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or subsequent lessons. The advantage of giving such a training is that the children grow up with the conviction that art can extend to all fields of life and is not confined to pictures or music ; and any improvement in the general taste would react on the manufacturers who would create a further demand for beautiful objects by fulfilling the one that already existed.

At present it seems to be the custom to make cheap things ugly. If this is done to force all lovers of art to buy the dearer articles, the practice is comprehensible ; otherwise it is not. An artistic pattern round a cup costs no more than an ugly one. The level of popular taste alone provides a market for much of the stuff in our poorer shops.

A similar purpose is served by a study of architecture. There is no need for houses to be as ugly as many of them are, and builders would not put them up and people buy them if general taste were better. Further, an appreciation of good architecture is as great a source of pleasure as an appreciation of pictures. One must perhaps go farther to gratify it, and so can satisfy the taste more seldom, but it is a great interest in life and a valuable incentive to travel.

Training in appreciation is something different from training in the practice of the art, and education should include both. Just as the true aim of appreciation is pleasure, so the true aim of teaching music or drawing should be pleasure ; and this in drawing is achieved through the satisfaction of the creative instinct, and through the pleasure derived from the contemplation of pleasing objects. There is a further source of pleasure. As has been said above, the practice of an art enables a person to appreciate more truly the works of others. All these aims are proper to the art itself. Art is taught for its own sake and the effect which it has on the mind. It is not taught for an extrinsic reason.

For a long time after its introduction into the elementary schools this was not realized. It is not always

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realized to-day, and the reasons which were put forward then and now, for teaching the subject, surprise us by their ingenious ignoring of the really important matters.

In 1889 T. R. Ablett was agitating for the inclusion of drawing in the elementary school curriculum, and he sets out a list of the advantages to be obtained from the subject.

"The education advantages of teaching drawing are these :

A. Educational drawing is valuable as a discipline for training and calling forth the certain powers and faculties of the mind which can be developed, to their full extent, by it alone.

These may be summarized as follows :

- (1) Perception of aesthetic influences is quickened.
- (2) Accuracy in observing and thinking is promoted.
- (3) The graphic memory is improved.
- (4) The imagination is exercised.
- (5) Free scope is afforded to the creative and inventive powers.
- (6) It combines training of the mind, hand and eye.
- (7) The powers of description are increased.

B. Educational drawing facilitates the acquirement of other subjects ; spelling, the arithmetic of space, writing is facilitated."

A year or two later drawing became a compulsory subject carrying a grant, with South Kensington as an examining body. The teaching was regulated by an illustrated syllabus inspired by a report on Technical Instruction, and intended to teach drawing suitable for builders and engineers. Immediately books began to be published showing teachers how to teach the subject,

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and one by Alfonzo Gardiner states with blatancy the purpose of their kind. Its title was :

HOW TO EARN THE DRAWING GRANT

A practical handbook for the teacher of drawing in Elementary Schools

It was published in 1891 and went through eight editions in three years.

The book starts with a summary of the regulations governing the teaching of the subject.

"(1) The Examination in Drawing is compulsory after August 31st, 1891, for all boys, except infants, whether in boys' or mixed schools. It is not essential that drawing should be taught to girls.

(2) The grants for drawing are paid on *average attendance*, like other class subjects : These grants are 1s. for 'Fair', 1s. 6d. for 'Good', and 2s. for 'Excellent'. These grants do not come under the regulation of the 17s. 6d. limit.

(3) Girls who take Drawing must also be taught Cookery.

(4) Standards of Examination. (The children may be regrouped for drawing.)

St. I.—Drawing, freehand, and with the ruler, of lines, angles, parallels, and the simplest right-lined forms ; such as some of those given in Dyce's Drawing Book.
(To be drawn on slates.)

St. II.—The same on paper:

St. III.—(a) Freehand Drawing of regular forms and curved figures from the flat.
(b) Simple geometrical figures with rulers.

St. IV.—(a) Freehand Drawing from the flat.
(b) Simple scales and drawing to scale.

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- St. V.— (a) Freehand Drawing from the flat.
(b) Drawing from rectangular, circular models,
and from easy common objects.
(c) Geometrical figures with instruments and
to scale.

- St. VI.— (a) Freehand Drawing from the flat.
(b) Drawing from models of regular forms and
from easy common objects.
(c) Plans and elevations of plane figures and
rectangular solids in simple positions,
with sections.¹

- St. VII.—(a) Freehand Drawing from the flat.
(b) Drawing any common objects and casts
of ornament in light and shade, or
Geometrical Drawing more advanced
than Standard V.
(c) Plans and elevations of rectangular and
circular solids with sections.²"

The actual objects to be drawn were governed by the "illustrated syllabus" and samples may be given, hard and easy for Standard III and a sample from the perspective of Standard V, where the framers of the syllabus have themselves greatly erred.

This Freehand Drawing was a holy mystery and ritual, and Mr Gardiner having expounded it, finds it necessary to recur ever and again to the importance of "effort", "hard work", "perseverance", and "steady teaching". One can only say "No wonder!"

No rulers were allowed, even for guide lines, and the method was as follows:

"Every part of the *first* sketch or 'roughing in' of a freehand drawing must be put in with as *fine* and *light* a line as possible—in fact the line must be so fine that it can *only just be well seen*. If the drawing is done in this manner, necessary corrections can easily be made,

^{1 2} Girls are not required to take the subjects specified in Standards VIc and VIIc.

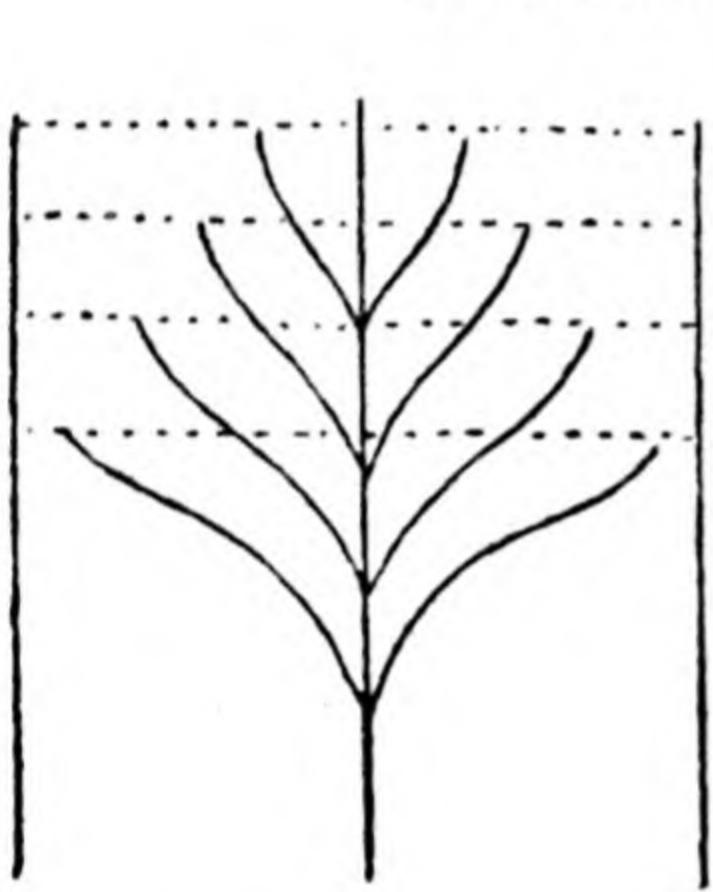
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because such lightly-drawn lines can be rubbed out without leaving unsightly smudges on the paper.

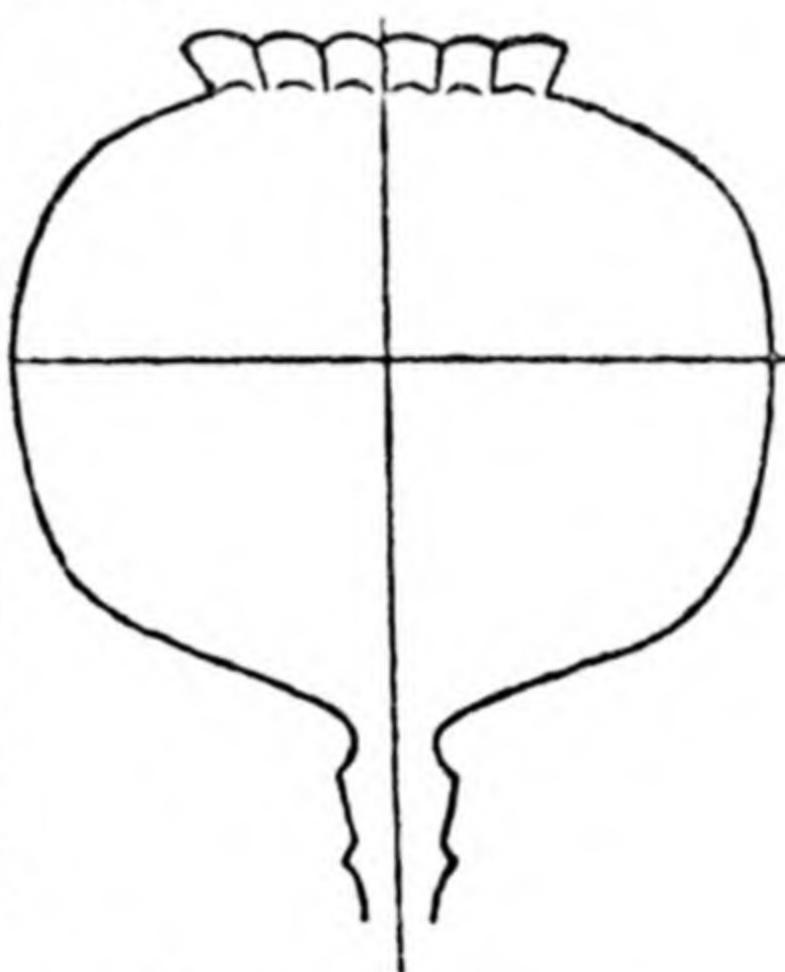
"But do not allow much rubbing out. It is far the best plan to practise freehand without rubbers in the early part of the year, so as to encourage confidence, and only to give them out when the exercise has been 'roughed in', and is ready for the 'finished line'.

"After the freehand copy has been accurately 'roughed in' much remains to be done before the mark 'Excellent' can be obtained for the exercise. The

STANDARD III

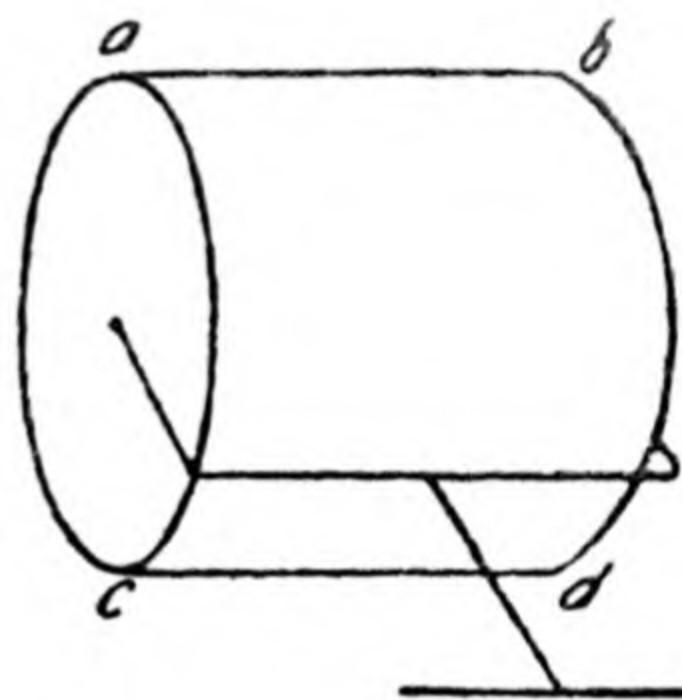


EASY



VERY DIFFICULT

STANDARD V



N.B. LINES a b, c d

drawing must now be rubbed out until it is only *just visible*. Corners, joinings, dots and dirty places must have special attention, and construction and guiding lines must be made to disappear entirely. Then, with a *fine pointed* pencil, every line must be gone over again and put in very carefully."

This tradition died very hard, and while it lived schools had many strange practices. Between 1900 and 1910 children learnt perspective by drawing diagrammatic flowers on cards placed in stands at all sorts of odd angles; and the wildest artistic excitement was the representation of a green jar in pencil.

Two factors co-operated to strangle art in the schools. One was the doctrine that the mind proceeds from the

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simple to the complex, and the other was a general distrust of any true art. The first point will be taken later in the chapter, the second has a curious historic interest.

Somebody invented the phrase "Art for art's sake", and good educationists of twenty-five years ago held up their hands in horror. Says Findlay : "'Art for art's sake' is a motto which should be banished from the school. The traditions of all worthy teachers point the same moral—that cleverness and skill with the Forms of Art degrade the worker unless his mind and heart are filled with worthy 'Content' associated with those 'Forms.'"¹ To us to-day this sentence reads very strangely, and we are tempted to ask how skill in the Forms of Art can be any more corrupting than skill in the Forms of Number or of Dressmaking. It is, however, necessary to remember a little about the history of art just at that period. Art teaching in the schools was guided by Mr Ablett and examinations in freehand drawing. But outside the schools art had recently produced the *Yellow Book*, Aubrey Beardsley and Swinburne ; and the educationists, slower than the surrounding population in assimilating new ideas, were still afraid that if they taught their children to draw, a new series of illustrations to *Salome* might be the result. Their remedy was to make art subservient to the "interpretation of life" in a moral sense : in fact, to allow the class to copy pictures of large-headed children playing family games, and ban the contemplation of Whistler's *Battersea Bridge*.

This much is true : the "art for art's sake" doctrine is either nonsense or a truism, and has not the dangerous meaning the moralists were apt to give it. Naturally, as art is not a necessity but only a pleasure, if it is pursued at all, it must be pursued for its own sake—it cannot be done for the sake of health, like breathing exercises, or for purposes of social advancement, like

¹ *Principles of Teaching*, 1902, p. 28.

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dressing beyond your means. On the other hand, unlike eating luxurious foods, art always has a reference beyond itself. It is done for the pleasure of the observer, for the satisfaction of seeing an idea made real—or very often, for the price the public will give for the product. Art is one of the most public functions of man. It is demanded in almost every department of social life : in religion, in politics, in war, in planning our cities and decorating our homes. “Art for art’s sake” could only be the slogan of a body of men who were anti-social in their outlook and unpopular with society. Moreover it could only have arisen when the fine arts were distinguished from the crafts to the infinite debasement of the latter. Art is always tending to pass beyond the picture gallery to the street. What worried William Morris about his early pictures was the frame ; and all true artists, in any healthy period of art, must pass as he did to a wider and more public sphere. Many of the pictures we esteem to-day, in their frames, hanging in surfeiting profusion in a gallery, were painted for the public service of religion to cover the bare walls of a church ; many of the massed treasures in the gold room of the British Museum were made for the service at a crowded table. The generation which cut off art from life, made one immoral and the other ugly. The last twenty years has brought about something of a reunion, and the teachings of Morris and Ruskin are at last being absorbed.

What happens then to the “worthy content” theory ? That also, as far as schools are concerned, is nonsense. The grubby urchin of eleven, worriedly drawing a chalk box, is not dealing with worthy content, nor is the babe in Standard I who scribbles industriously with a bit of red pastel in imitation of a ball of worsted.

Art teaching in schools is not a department of morals. It has a moral bearing :—if children enjoy art, they have learnt an interest and hobby which is quite harmless or even healthy. If they follow this they will at least be kept out of mischief. But this moral aim can

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only be achieved indirectly through the *pleasure* which art gives, and any premature emphasis on morals to the destruction of pleasure is fatal to the moral influence of art.

Therefore the art teacher in school must keep the quality of pleasure ever in mind and all his work must be adapted to securing this end. This does not, however, mean that he must never teach technique. Children do not like to do bad work. They like to be shown how to do the thing right, and the satisfaction in the finished picture is much greater, if, with help and trouble, they have really done it well.

The difficulty which faces the teacher is how to balance the parts of his teaching. There are two elements to consider, individual invention and creation, and technique. Without invention Drawing becomes the dull copying of objects or other men's drawings ; without technique the best ideas are wasted.

This brings us to the second point : what form is the teaching in aesthetic production to take ? And here at once the two aims of the teaching assert themselves ; children must learn to be original and creative ; they must also learn the technique through which to express this originality.

Some twenty years ago the schools were obsessed with the point of technique. This technique was always carefully graded. It progressed, according to the ideas of the time, from the simple to the complex ; and the syllabus given above, in which children begin with *straight* lines and proceed to *curved* ones, is quite in accordance with theory. So is the progression from objects in the flat to objects themselves. The whole theory is psychologically unsound. The mind proceeds from the concrete to the abstract, and the concrete is never simple.

When drawing became a little more liberal, instruction in drawing took the form of exercises in shading, colour mixture, perspective and so on. This type of teaching

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still flourishes in the less progressive districts. One of the writers entered a Standard IV and found boys and girls drawing a sock from the inside of a shoe, which was pinned on the blackboard. She asked the student in charge why such a model had been chosen and the answer was : "The class teacher *particularly* wanted me to take it. It is an exercise in proportion." Another very favourite exercise is colour shading, or "the wash", in which the children cover a piece of paper with red paint, which is always in the end streaky.

The ultimate reason for the retention of the exercise, even though the theory has changed, is probably the training which so many art teachers receive. The professional artist must practise special effects, the lecturer in a training college has probably received a training designed to produce professional artists, and therefore he passes on to his students art-school methods which they misunderstand, and transmit in garbled form to their children.

The excessive formalism of art teaching led to a violent reaction, especially in the lower part of the school. There began to be talk of "expression work", and children were encouraged to take their pencils or chalks and express their own ideas in an uninstructed way. There is no doubt that small children enjoy themselves doing this, there is also no doubt that many of the results achieved lack all other educational value. The older the child, and the cleverer, the less satisfactory such drawing becomes. The little child is quite uncritical and therefore regards the work of his hands with pleasure; the moment that self-criticism begins there is discontent. The child draws and knows that the product is not true to nature or to his internal vision. As soon as this happens the child should turn to the teacher for help. "Please will you show me how to draw a horse?"

The average teacher of Drawing in school is bound to turn a deaf ear to this plea—he generally *cannot*, at a moment's notice, draw a horse, any more than the child

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can. He has not even a picture of a horse to show the child. The educational value of the lesson is gone, the child is discouraged, and an incipient interest in art lost.

This individual drawing of imagined scenes is the most difficult form of drawing to teach well. As a result, it is not *taught* at all—the class merely scribbles.

Part of this doctrine of expression has involved the condemnation of all copies. There is nothing to be said for the “exercises in Freehand Drawing” which one well-known educational firm used to print on the back of its Arithmetic cards, and the rustic seats and woolly elms of the Victorian school rooms are out of date ; but children like copying good pictures and they learn a great deal from them. The wise art teacher has a stock of pictures, good in themselves and likely to appeal to the children. Old copies of *Punch*—in their advertisements and drawings—afford invaluable models for black and white work ; posters show how a landscape can be simplified, and the decorative use of various elements such as clouds. Illustrated books of travel will teach Geography and art concurrently ; picture postcards often show animals in movement. All these things appeal to children under fourteen, and so do volumes of art publications. Not only do the children copy these pictures directly, but their influence is clearly shown in later original compositions. In a certain preparatory school of three hundred boys, every child likes drawing and even the worst performers acquire a skill in technique and in composition far beyond the ordinary. The ordinary elementary school child with one or two hours’ drawing a week never makes a fraction of the progress that these children, of exactly the same age, do in less than an hour a week.

Exercises are necessary if the children are to achieve any real skill in Drawing, enough skill that is to take any satisfaction in the practice of the art by the time they reach a critical age ; but they must be exercises that

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appeal in themselves. Perspective can be taught by drawing and painting toy railway stations, houses or caravans ; the use of colour by flower painting ; putting on washes by copying a Japanese print. The child is not interested in technique *per se*, but he will learn it in conjunction with other attractive material, and when it is learnt he will take a pleasure in practising it. What is needed is individual help and abundance of interesting material on which to work.

Many teachers feel themselves specially drawn to the most technical aspects of the subject ; they like teaching design. This is quite comprehensible. The explanation of the principles of design is much nearer to an ordinary class lesson than the teaching of object drawing can be. The teacher has a greater superiority over the class, and the matter can be more definitely prepared. Design is a fascinating and useful form of art, but it can be overdone.

In some parts of the country the art teacher labours under a particular disadvantage. He has not the proper materials. The allowance of money for each child goes mainly in stationery and text books ; there is little or nothing left over for art materials. In consequence brushes are bought which have so little spring that it is almost impossible to get a clean line with them, and the majority of the children are confined to the messy and inartistic school pastels. Good chalks are delightful things ; but the elementary school child with half a dozen smeared fragments in his box is in no position to draw anything. Moreover, the method of mingling pastel colours is less comprehensible than that used in water colour painting, and the range of effects is infinitely less.

Pencil work is much prized in many schools, yet it is generally difficult and uninteresting to the children. Colour is so attractive to them that to represent objects continually without it is disappointing. Moreover the analysis of colours, so as to arrive at their comparative *brightness*, which is necessary in good pencil work, is

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very difficult. Lastly, to do pencil work with any pleasure, materials far superior to those generally provided are required.

Recently, in many parts of the country, a change has come over Art teaching. This is partly due to the influence of Austria and Czechoslovakia and to exhibitions of children's work from those countries. It is also due to inspiration by English art teachers, such as Miss Marion Richardson.

This "New Art", as it is sometimes rather unfortunately called, gives children from earliest years the chance to express themselves freely in colour and form. They cannot control their hands sufficiently to make fine movements, so they are provided with large sheets of paper (usually "sugar", or wrapping, or kitchen paper), with thick hog's-hair brushes and tempera colours mixed in jars. With such equipment they set to work with astonishing zest and concentration to produce "pictures" which may be attempts at reproducing some actual or imagined scene or incident, or may be patterns with some repeated unit of design. Very often the two kinds of "picture" are one—the children seem naturally to express themselves rhythmically and to arrange the objects in their picture in some, often conventional, pattern. The delight this form of expression gives to children is always obvious, as is also the beauty and vigour of many of their productions.

They are not given any formal lessons in technique in the early stages—if ever—and they know nothing of perspective as dryly taught in the schools. If they want to know how "to do a thing", e.g. a horse, they are asked to look at one. Like all true artists, many children show an extraordinary capacity for *selecting* the significant features of an object or scene and leaving out what they do not want. Sometimes they seek help from other people's pictures.

Little children, even if they are supposed to draw or paint from a model, rarely give it more than a cursory

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glance. They paint and draw from their experience, not from what they see. After all, to *see* only is to make an abstraction from the sum total of experience which we only learn to do with difficulty.

About nine or ten, children begin to ask for help in technique, and a good teacher gives this help as it is required.

In the senior schools comparatively few children retain their delight in this free picture making for its own sake. Most children, like adults, prefer to make some object through which to express their aesthetic feeling. That is why crafts of various kinds become important at this stage. Textile printing, lino and wood-block printing, stencilling, often develop and reach a high standard of design and execution. Weaving, cabinet making, embroidery, all the business of book-craft and its accessories, give opportunities for planning, design, and satisfaction in good workmanship. At least one school has taken to mural decorations, others develop puppetry to a high standard of design and finish.

In the infant and junior schools also handwork is gradually becoming much freer, and a much truer medium of expression. It is realized that for little children, the important thing is to keep alive their desire to do, and to encourage their confidence in believing that they can accomplish what they want to do. They need experience of different kinds of material —plastic, pliable, resistant, smooth, rough and so on. They need to experience the use of different tools and to learn by experience which tool to use for different materials and different processes.

This cannot be taught in formal lessons where, for example, every child folds a piece of paper into sixteen squares, step by step, following the teacher's instructions, or where he dully makes a raffia mat which he does not want, to a design he does not care about, by a series of routine actions through which his mind, his initiative and his critical abilities are all sound asleep.

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In a good school, the class-room, during handwork lessons, becomes a busy workshop, where children individually, or in groups, are working at different things, in different materials, and for different ends—but always their own purposes are operative, and they themselves can judge the result of their work by seeing whether or not it has fulfilled their purpose. The adult, and often mistaken, standard of perfection, is not called into play. Experiment, choice, trial, are allowed free play. One has only to watch the concentrated attention and zest of children so engaged to be certain of the value of such methods.

But it follows that time tables, schemes and equipment will have to be very different from those of an older day. Longer periods are necessary, rigid schemes of lessons will tend to give place to suggestions for materials, tools and purposes and to careful records of individual children's work ; the older desks are replaced by tables at which one can work easily, and water, light, gas and electricity are available, even in junior schools.

In the senior schools, as has been said, crafts of a more definite kind, often with traditional technique emerge, and some standards of achievement in a craft sense are looked for. But the free work for the younger children is an essential preliminary to this.

Lastly art is too often confined to the class-room. The children do not realize that the whole world lies before them to paint, they think that when you draw you set up a model and copy it. Wherever possible the teacher should introduce at least the best of the children to outdoor work, and, if they cannot actually paint out of doors, they can be taken for a walk and shown how in nature you have foreshortening, the perspective of colour and line, arrangement and composition. This prepares the way for later work out of doors, it shows the children how to look discriminately at a landscape, and when they come to attempt original composition they can use their observations in new combinations.

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QUESTIONS FOR DISCUSSION

- 1.—Make a drawing (either a plan or a picture) of your ideal class-room, showing seating accommodation, windows, cupboards, etc., and indicating the colour scheme for walls and furnishings.
- 2.—Collect from schools of your acquaintance a list of the pictures possessed by them, and draw up a list of your own, indicating in which rooms you would hang each picture.
- 3.—Show with actual examples the kind of art work you might expect from children of different ages.
- 4.—Discuss the part that design ought to play in a school art course.
- 5.—Discuss the kinds of artistic handicrafts that are possible in school and say what are the difficulties and advantages of each.

BOOKS

RUSKIN, *Fors Clavigera*.
Modern Painters.

WILLIAM MORRIS, *Lectures on Art*.

OSCAR WILDE, *Salome*—with Beardsley's illustrations.

WHISTLER, *The Gentle Art of Making Enemies*.

NANCY CATTY, *Training in Appreciation*.

AESTHETIC EDUCATION : II. LITERATURE

"To show a pleasant prospect in the way."

IF all art is useless, as Oscar Wilde asserted, literature is joined with music and painting in this proud condemnation. Literature exists for its own sake as truly as does the Aphrodite of Melos. Poetry may influence morals, but poetry does not exist, neither do we love it, primarily on that account. A good play may make us reconsider our attitude to Aunt Jane, but that is not the reason for its first value to us.

Nor can literature be subdued even to an educational use. It may form part of a course on the Humanities, as is considered in a later chapter, but it also holds its place in school purely on its own merits, in just the same way that art does. Children may draw to illustrate their history lessons, but that is a mere accident, a temporary borrowing of a power ; it does not or should not encroach on art itself. Literature, therefore, though it forms part of another course, has a method and justification all its own. Also the literature course will certainly be wider than that included in the course on the Humanities.

Art has its place in our lives because we enjoy it. In as far as we take pleasure in it, we shall procure it and be influenced by it, and from that pleasurable experience all manner of good—or ill—may flow ; for whatever influences feeling influences man's life. If we are indifferent to the appeal of art, we shall either act the part of one who appreciates because such an attitude shows "culture" ; or we shall look with a certain amount of pity on people who like "such things", and be prepared now and then to dally with the

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pretty playthings which no practical man can take seriously :

The lunatic, the lover, and the poet,
Are of imagination all compact. . . .
The poet's eye in a fine frenzy rolling,
Doth glance from heaven to earth, from earth to heaven,
And, as imagination bodies forth,
The form of things unknown, the poet's pen
Turns them to shapes, and gives to airy nothing
A local habitation and a name.

The Puritan, who acknowledges the power of art but distrusts it, is a far less dangerous enemy to the expression of beauty than is a Philistine like Theseus !

Literature is the most procurable of all the arts. Good pictures, good music, fine buildings and sculpture must be sought with long travel and much expense. The possessor of a good text of a poem, play or novel bought for a shilling or two, is in direct touch with the artist.

But the schools have done little to open the way of pleasurable experience of literature to children, and have succeeded only in a small degree in stirring a genuine love of fine things in prose or verse. The "thrillers" and "sob stuff" hold almost unchallenged sway. The experience of one of the writers is one that rebuffs only too many teachers. A class of girls who had left the elementary schools a year previously and who worked in factories during the day, met to study English. The syllabus was left to the teacher. She began by investigating the opinions of the class. Would they like poetry or prose ? What poetry had they studied ? What plays had they seen or read ? To her amazement nineteen out of the twenty girls alleged that they had read no poetry. She mentioned some poems likely to have been in the school syllabus. "Oh yes, miss," answered the girls, "we did that, but that was Recitation at school!" The tone of voice and expression of face left no doubt that the recollection was not

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a pleasant one. Anything that had been touched at school was distasteful. Plays? They had "done" Shakespeare; but preferred now to see Rudolf Valentino or Mary Pickford on the films. The teacher reminded them that the Lena Ashwell Players came to the district and asked if they ever went there. "Yes, miss," answered one girl, "but the stage there is small, and the curtains are just dull green, and there's no orchestra, and no carpet on the floor, and when you've worked all day sticking labels on boxes, you do want a bit of ease and comfort and a lively tune at night, and something you don't have to think about."

The teacher, knowing the work that was done in the elementary schools in that neighbourhood, and remembering the interested and apparently enthusiastic pupils of literature lessons that she had heard, was given furiously to think. The pleasure that the children at school seemed to derive from hearing verse well read was purely transitory, and faded, leaving behind only an antipathy to similar experiences later. No thrill of appreciation of school literature could rival those of *The Perils of Pauline*, or *Her Only Child*, and more depressing still, the world in which these girls had to work was one which left no energy for thought. The girls read *Tit-Bits*, *Peg's Paper*, and *Smart Novels*.

In the homes of the slum quarters of towns, books are few and poor. It was found that in a S.E. London district, where families were living in one or two rooms, the home libraries consisted of some six or seven books; these were either prizes won at Sunday School (chiefly Angela Brazil) or old books picked up at jumble sales. Ninety per cent. of the children read no poetry at all outside school.

We deplore such conditions and assume a superior attitude, thanking God that we, by luck or worth, are not as others are. An investigation of the daily reading done by members of an average school or Training College senior common-room is enlightening. All these

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educated people have at one time had literature thrust upon them. The majority divert themselves with modern novels, especially detective tales, about a quarter read verse, and that quarter includes the English Staff who have to keep abreast of current literature, and who read as much to sample as to enjoy ; another quarter quite frankly prefer musical comedy to any other kind of drama ; and a considerable section gibe good-humouredly, but quite seriously, at poems, drama, and literature generally as sheer waste of time.

And the genuine lover of poetry and good prose knows well that desire for these things comes when it will. We pick up an anthology and read when the mood is on us, and we read what suits our mood. We cannot at ten-thirty be ready to appreciate Milton, nor enjoy Masefield precisely at four p.m.

We grow into love of a novel, a poem, or play as we develop. Our enjoyment, sometimes our understanding, is dependent on our experience. A fine thing in literary art cannot be "done" at one "go", any more than a picture or a sonata can. We must know it and get used to it, and it will enrich itself from our fuller and growing experiences.

There is, undeniably, a widespread reaction in England against the literature that is "done" in schools. The surest guarantee of the success of the moderns is that it is the classics which are studied in schools.¹ Any lecturer in a Training College knows that one of his most difficult tasks is to show the students that Shakespeare, *although* a school subject, can be enjoyable, and that Chaucer, despite examinations, is good fun. And when the student leaves College, he no doubt takes ten years to discover that Wordsworth, *although* that ass at College lectured on him, really *had* some sense, or that there is, after all, something to be said for modern verse, although he had to "get up" —'s Anthology for the Certificate.

¹ v. Adams in *The New Teaching—English*.

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Literature is so comparatively new in education that the failure to arouse real and lasting appreciation is perhaps excusable. Fifty years ago English Literature was first taught as a specific subject to certain individuals in Standards IV to VI—a three years' course. The syllabus of the first year was "a hundred lines of poetry, got by heart, with knowledge of meanings and allusions". In the second year, "two hundred lines of poetry, not before brought up, repeated with knowledge of meaning and allusions". In the third year, "three hundred lines of poetry not before brought up, with meanings and allusions". Together with this "literature" went a fitting syllabus of "creative" work. In the first year, "writing a letter on simple subjects", in the second year, "a paraphrase of a passage of prose", and in the third year, "writing a letter or statement, the headings to be given by the Inspector".

In 1882 the reading might include a "passage from Shakespeare or Milton or some other standard author, or from a History of England".

In 1900 the *Code* does not mention literature—but "English, by which is meant reading, recitation, writing, composition and grammar." Only in 1906 does Literature begin to get its due; under the heading of English Language is listed "reading for information both silently and aloud, and written composition. Throughout the course the reading books used by scholars should include some pieces of literary merit, some of which should be learnt for recitation. In the higher classes one or two books should be read as a whole."

The teachers now on the point of retiring were moulded by the earliest syllabus mentioned here. Some have recovered from it sufficiently to include "appreciation lessons" in their syllabuses. Some have not only recovered, but reacted. We said to a man, eminent in the educational world to-day, between sixty and seventy

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years of age, and reared in the old system of payment by results and pupil teacher apprenticeship : " There must be something to be said for the old system. It has produced you, and men like you, who to-day are the backbone of the educational profession. There is — and — and — " through a list of some dozen names. The man fired up. " There is absolutely *nothing* to be said for the old system. If I succeeded it is in spite of it, not because of it. It robbed me of my boyhood. I never learnt to *enjoy* literature or games or learning till I was free of it—grown out of it."

And there are some who have never got past the system which bred them. In our anger at these, let us not forget that our theories of to-day will be the clogs on progressive ideas of fifty years hence. A good teacher must grow with the times.

It is easy to gibe at the superficiality of American education, but Americans succeed better than we do in making the life of the school part of the life outside, to the extent that books read in school are also read out of it and after it ; one of the writers, in a year's work in Western America found extraordinarily little of that reaction against school studies which is so frequent and so disheartening in England. The books and poems and plays studied in school are the subjects of popular talk, and there is every sign of enjoyment of them.

American syllabuses and methods are not swayed by tradition to anything like the extent that English ones are. In Teachers' Colleges most of the time is devoted to contemporary and recent literature. When the teachers leave college, when and if they have any voice in the making of the syllabuses, they choose therefore from the literature they know and not from the antique. More than one M.A. in English in America has no knowledge of Chaucer and extremely little of Elizabethan drama outside Shakespeare. An English M.A., on the other hand, asked to teach an adult American class Lyric Poetry, found that there was scarcely any common

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ground of knowledge on which teacher and taught could meet. The Americans were up in all the latest verse, good and otherwise, but knew little even of Tennyson beyond the name—the English woman was so pre-occupied with the lyrics of Elizabethan and Carolingian times that she found it hard to give more than an hour or two to the moderns.

A building, sixty years old in America, is antique. American interests are all at the growing point of experience. Consequently the people are the slaves of fads and are in the incessant chaos of experiment ; and their standards are little more than fashions. The problem for English schools is to emulate America in clearing away the barrier between school and life outside, but at the same time to develop, as America has not done, reliable standards of taste and judgment, and to develop these, without making the pupils feel that these standards are foisted upon them by authorities old-fashioned, snobbish, and not of their world.

The English official statement of to-day seems liberal enough. "A large proportion of the training in English which the Elementary School should give might be described as 'The Use of Books'. Books should be used as a source of enjoyment, as a means of gaining information, and for purposes of language study. . . . The most general stimulus to reading is pleasure." The teacher's task is "to enhance the quality of the children's pleasure by helping them to find it in good books."¹ The teacher's way is open—if only he is fitted for the task, and the headmaster will allow him to perform it, and the necessary books are available.

The teacher's fitness for the task depends on his own taste and on his training. A teacher who sincerely loves literature will probably succeed in sharing his enjoyment with his class. The present training of teachers in English in Training Colleges aims at opening

¹ *Handbook of Suggestions for Teachers*, Board of Education, 1927.

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a way for them into literature. The syllabuses¹ are only in small measure concerned with material that the students will teach in schools. The colleges want to open the realm of literature to the student, to help him to understand and love it, to inspire him with the desire to explore farther, and then by acquainting him with the needs of children, to leave him free to judge and choose for himself. This is a daring way, but it seems the only one in which sincerity can get fair play. No man can *force* another's tastes. A taste *assumed* for the time is not sufficient to win children's appreciation. They are quicker than adults to sense insincerity. This method means that the student does not leave college able to make a class of sixty children "appreciate" Shakespeare or Wordsworth. It means that for a year or more the young teacher will have to feel his way.

The problem of books is dealt with in many ways. Publishers now realize that school books of literature should look attractive, and many series are produced that are cheap, well printed and pleasant to look at and hold. Some authorities arrange for different sets of books to circulate from school to school, so that frequent change is possible.² Some schools interchange sets of books with the sanction but without the organization of their local Education Authority. In some districts children buy many books for themselves. Anthologies are made with duplicated copies. Many teachers are perpetually hectographing copies of poems. Many schools have collected excellent school and class libraries. In one county, each school may claim one shilling per head for library books. At least one headmaster will not take it! In many districts the schools work in connection with the local public libraries.

In practice it seems that lack of material cannot prevent an enthusiastic teacher spreading his gospel.

¹ v. *Training College Bulletin*, November, 1927.

² e.g. in London and Gloucestershire.

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Lack of material is an excellent excuse for the apathetic or incapable one.

One's own experiences of the enjoyment of literature give the basis for one's theories concerning literature in schools. As Cleon¹ very well knew, one's mind is too big for one's own life. The "wanderlust" torments the mind more agonizingly than it does the body. We must wander in the realms of gold. To a spirit that has once journeyed thus, denial of such travel makes the present a prison indeed. In this mental journeying variety is essential to pleasure. We wish now to travel easily, jestingly ; now to weigh and consider seriously ; now to hurry on, and again to pause and re-visit. In school syllabuses and methods the principle of *variety* is not sufficiently considered. Light reading and humour are conspicuous by their absence in most schools ; and the *pace* of reading is apt to be slowed down to that necessary for careful detailed study. The arts of skipping, ramping, or losing oneself in a book are too generally neglected.

We especially enjoy in literature the stretch of spirit in the world of emotion. We must know the whole gamut of feeling, and know it more extensively, may be more intensively, than we can in actuality. We must have these experiences vicariously. The child, especially about twelve onwards, yearns towards melancholy as sincerely as towards gaiety. Many a boy or girl has trudged through the cold, finding intense pleasure in repeating :

Break, break, break
On thy cold grey stones, O Sea,
And I would that my tongue could utter
The thoughts that arise in me.

A small girl of seven loved to say the lines of Samson Agonistes that she had once heard read : " Oh dark, dark, dark amid the blaze of noon . . . "

And we enjoy these emotions as expressed in art, because the mind finds pleasure in setting order and

¹ Browning, *Cleon*.

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shape on chaos. Art does not merely hold up a mirror to Nature ; it unifies, arranges, emphasizes it to present some experience. This artistic ordering and shaping is natural to man. The most primitive tribes conventionalize the expression of emotion. The excitement of war is expressed in rhythmic ordered dance ; grief and love are conventionalized in song, verse and dance with rhythm and refrain. The child's wild crying soon becomes a series of rhythmic sobs, his impatience for dinner is expressed by a rhythmic beating on the table with a spoon. Without teaching on the matter, children and adults alike feel the pleasure of orderliness in art. In literature, therefore, all the elements in that orderliness, rhythm, rhyme, repetition, alliteration, assonance, balance, onomatopœia make a direct appeal to feeling, and are capable of giving pleasure to the untutored mind. Without being able to single out a single element in a poem's technique, we may still enjoy it emotionally to the full.

The intellectual study of technique cannot alone inspire appreciation in anybody. We may *admire* intellectually, but we cannot *enjoy* unless the poem, picture, novel or play, by its own power, gives us enjoyment. We may have to prepare our minds so that it can work upon them ; but we cannot argue ourselves into pleasure. We must "catch the joy as it flies".

On the other hand, the study of technique may greatly *enrich* our pleasure. It is too often assumed by students that we always murder to dissect. Dissection, rational argument, understanding of technique need not be death to any art. The experience of those who have learnt to enjoy artistic technique intellectually without losing the emotional fervour, is richer than the experience of those who respond to technique without realizing why. It is obvious that a study of technique should only begin when children are already sufficiently attracted to literature to want to investigate it further. Otherwise

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talk of rhyme and rhythm and refrain is as dull as talk of carburettors, magnetos, and connecting rods to one who has never driven a car and never wants to.

Without "appreciation lessons" of any kind, people read, and enjoy what they read. The schools cannot claim any credit for that outbreak of voracious reading characteristic of the adolescent child beyond the fact that the school taught him the mechanics of reading. The chief object of the school is "to enhance the children's pleasure by helping them to find it in *good* books", that is, to give them standards in content and in form.

The standards of many people whose judgment is excellent are not matters of conscious argument. They would often be hard put to it to tell you *why* they like a play or a poem. Children whose taste is good are exasperated by the worrying "Why?" of the teacher. Yet the taste of such people accords with the experience of generation after generation of men, women and children who have found pleasure in the same things.

The taste of such people is founded on a sentiment for the good things in literature. They have pleasant associations with the best, and, finding the bad incongruous, they reject it. The taste so formed is the soundest and most enduring. Charles Lamb says of his sister that "she was tumbled early into a spacious closet of good old English reading, without much selection or prohibition, and browsed at will upon that fair and wholesome pasturage. Had I twenty girls, they should be brought up exactly in this fashion. I know not whether their chance in wedlock might not be diminished by it, but I can answer for it, that it makes (if the worst comes to the worst) most incomparable old maids."

If standards are formed by association, then we must see to it that children are given of the best that is within their comprehension, and that the way to further delights is opened for them. We must see, also, that what we

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hope will be loved is presented in circumstances as lovely as possible. The pretty book, the kindly teacher, the fine reading or recitation, the sunshine shining through a clean window on beautiful colour within are conditions which have helped to endear to us many of our cherished mental toys. An ugly edition, a cross or tired teacher, drab dirty walls, or the close smell of ill-aired rooms, are for some of us so closely associated with certain poems and stories that to this day we cannot rid our minds of the unpleasant associations that accompanied our first meeting with them.

It seems that the most constant quality in the content of literature that has continued to give pleasure to generation after generation of people, is that of *accuracy*—of external fact or of mental experience. If a tale or a poem or a play is true to our acts, thoughts, imaginings, dreams or hopes, we enjoy its content. Such are *The Pilgrim's Progress*, *The Song of Solomon*, *The Ancient Mariner*, *The Forsaken Merman*, De la Mare's *Listeners*, and Wordsworth's *Daffodils*. It is the falseness in the thought or feeling of such poems as *The May Queen*, and *I love it, I love it, and who shall dare*, that spoils our pleasure.

In form, the most constant quality in those things that seldom fail to give pleasure, is the quality of *efficiency*. That form is most enjoyable which most effectively conveys the artist's meaning—his *full* meaning, of thought, feeling, mood, and atmosphere. Sometimes the form is unobtrusive as in Herrick's verse, sometimes it is necessary that we should be aware of it to get the full meaning of the poet, as in Greek drama.

The student should consider his own ways of estimating good and bad in literature. The experimentally-minded American has evolved Exercises in Judging Poetry. If the student attempts to say why he prefers one version to another in the specimens quoted here, he will at least realize the difficulty of the questions on reasons for appreciation which he too often puts to children.

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Read the poems, A, B, C, D, trying to think how they would sound if read aloud. Write "Best" on the dotted line above the one you like best as poetry. Write "Worst" above the one you like least.

MOTHER GOOSE

A (.....)

Where's the milk?

Where's the milk-man?

He spilt his milk in the channel
And froze his chin.

B (.....)

Milk-man, milk-man,
Chin, chin, chin,
Fell in the channel,
Chin, chin, chin.

C (.....)

Milk-man, milk-man, where have you been?
In Buttermilk Channel, up to my chin.
I spilt my milk and I spoilt my clothes
And got a long icicle hung to my nose.

D (.....)

Milk-man, where have you been to-day?
In the Buttermilk Channel, sir, he said.
I spilt my milk, and got some ice
On my clothes and on my nose.

Read the poems, A, B, C, D, trying to think how they would sound if read aloud. Write "Best" on the dotted line above the one you like best as poetry. Write "Worst" above the one you like least.

POTATOES

A (.....)

When you have to eat potatoes
With other things,
And their jackets taken off,
That might be good for Dukes and Kings.
But if you want to know how they taste
The way Nature means you should,
Cook them over a fire of rubbish
And eat them in the woods.

B (.....)

Potatoes on the table
To eat with other things,
Potatoes with their jackets off,
May do for Dukes and Kings.
But if you wish to taste them
As Nature meant you should,
Why, cook them at a rubbish fire
And eat them in a wood.

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C (.....)

Potatoes at the table
To eat with other food,
Potatoes carefully prepared,
May be very good.
But if you want to eat them
So that you'll want some more,
Cook them over an open fire
And eat them out of doors.

D (.....)

Ho, for the Hot Potato !
Of all the feast the king !
I love it more than all the rest,
Ice-cream or anything !
And of all the treasures of Nature's best
The one I most admire
Is the glowing hot Potato,
Just coming from the fire.

Read the poems, A, B, C, D, trying to think how they would sound if read aloud. Write "Best" on the dotted line above the one you like best as poetry. Write "Worst" above the one you like least.

SEA FEVER

A (.....)

I must go down to the shore again, and find the sea and the sky
And have a trip on a good old ship as it goes sailing by ;
And stand at the wheel and hear the wind, blowing through the
masts,
And see the sunrise if I can, while foggy weather lasts.

B (.....)

I must go down to the seas again, to the lonely sea and the sky,
And all I ask is a tall ship and a star to steer her by ;
And a wheel's kick and the wind's song and the white sail's
shaking,
And a grey mist on the sea's face, and a grey dawn breaking.

C (.....)

I want to get down to the ocean again, to the wonderful sea and
the sky, .
And all that I ask is a ship of my own and a compass to steady
her by,
And the pull of the wheel and the sound of the wind and the
glistening rigging so free,
And the grey of the dawn coming up o'er the bow, and a mist on
the face of the sea.

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D (.....)

I must go down to the sea again, to the lonely sea that I love,
When my heart is tired of men's wicked ways I can gaze at the
stars above ;
I can feel the swell of the good ship's breast, and sigh with the
song of the wind,
As all the sorrow I ever knew comes back into my mind.
And the darksome night gives way at length to a sad and
gloomy day
And the mournful sea doth clothe herself all in a shroud of grey.¹

Poetry has those qualities that children naturally love. Just as a nation has verse literature before it has prose, so the child enjoys verse before prose. He first delights in Nursery Rhymes and his earliest tales have the qualities of verse—repetition, alliteration, and symmetry. “Who’s been sitting in *my chair*” must come three times in its proper place, and with the appropriate tone of voice. “I’ll blow and I’ll blow, and I’ll blow your house down,” says the wolf in the *Three Little Pigs*; and woe betide the narrator if he dares to skip or hurry the repetition and the proper rhythm of the phrase.

Children choose names because of the beauty of their sound. One child named her doll “Influenza Chlorodyne”.² The negroes in America similarly call their children “Pneumonia”, “Hydrophobia”, or “Carburettor”; and from babyhood the making of certain sounds—alliterative p’s and b’s, s’s and t’s—gives great satisfaction. The pleasure which an adult feels in such phrases as “The sessions of sweet silent thought”, “The furrow followed free”, “Weary the way of the wind is”, is probably based on the physical pleasure derived from saying them. One joy of reading good verse aloud is that it gives lips and tongue so much satisfaction to form the sounds in the order in which they are to be read.³ For little children poems with strong rhythm and pretty combinations of consonants

¹ *Exercises in Judging Poetry*. Series X, by Allan Abbot and M. R. Traube, pub. Teachers’ College, Columbia University.

² v. Tomkinson, *Teaching of English*.

³ Read aloud any of the best lyrics of Shakespeare, Shelley, Keats, Coleridge or J. E. Flecker to prove this point.

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and vowels should be chosen. The words should be sufficiently comprehensible to convey the meaning ; although children delight in new long words for the sake of their sounds. The thought or feeling should be within the child's real or his imaginative experience. Many children tire of poems or stories about children. To them fairies, giants, princes and princesses, dragons, the Guard at Buckingham Palace, kings and dairymaids are all as real as Charlie Jones next door, and, although each is distinguished by a suitable symbol—a pair of wings, a club, rings on every finger, or a crown—all are part of the child's own world. The success of Mr A. A. Milne's *When We Were Very Young* is that he realizes that this heterogeneous world is familiar to the child, and that it is homogeneous to his imagination.

In the middle classes of the upper school, poems with stories in them are popular ; especially stories of simple, heroic actions, told with appropriate rhythm. Poems like *The Pied Piper*, and *Three Jolly Farmers*, lead on to *Horatius*, *Goblin Market*, *Hiawatha* and *The Lady of Shalott*, while lyrical poetry of more complicated form and more subtle feeling is read. Longer or more complex stories, lyrics of more mature emotions are the poetry of the upper classes. At every stage light verse and humour should have a place.

In an anthology of poems¹ which have proved most popular with children of all kinds, the great variety in theme, form and feeling is remarkable. Although modern poems find a place, as they do now in every wise school, old favourites are there too in full force. *Forward the Light Brigade*, and Nash's *Spring* may be hackneyed to us, but to every generation of children they offer their delights anew.

" Anything like a History of Literature is out of place in the elementary school." Biographical details of the author, talks about movements, irrelevant historical backgrounds whether of the author or the poem are not

¹ *Poems Chosen*, pub. Blackwood.

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desirable. The poem's the thing. The introduction to it should be sufficient to make its presentation pleasant to the children. The introduction may have to create "atmosphere"—especially if the previous lesson in subject and manner has left a mood unsuitable to the poem ; it should always remove as many difficulties of understanding as possible. A judicious use of words or phrases will prepare the children for meeting these in the poem itself. Some schools, where the staff is able, correlate music and poetry, and suitable music is played to prepare the children's minds for hearing a poem.¹

Whether the children should have copies of the poem depends on the length and difficulty of the poem, the age of the children, and the teacher's ability to read. In any case, the teacher is greatly handicapped unless he can read well. In many cases, it is worth the teacher's while to learn the poem by heart. He will then recite it more convincingly, and he will demonstrate his own affection for the poem which he will probably ask the children to learn by heart also. Too frequently children feel that the teacher imposes tasks on them which he would not do himself. The reading should bring out the rhythm, the rhymes, and beauty of the sound phrases. Any "expression" which destroys these things lessens the direct emotional appeal of the verse. Many feel that it is better to err toward sing-song, than to err in the opposite direction. The reading, without being theatrical or sentimental, should show that the teacher shares the feeling expressed in the verse. For this, the tone of voice, the pace of reading and the emphasis require especial care and preparation.

Some teachers are willing to leave the matter here, without further comment,² and let the poem speak for itself. Every teacher knows that the next step after the reading is a very dangerous one. By an inept remark or question he may tumble down the magic castle like

¹ For details v. W. S. Tomkinson, *The Teaching of English*, p. 69.

² v. Quiller-Couch, *Art of Reading*, "Children's Reading".

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a pack of cards. If the children themselves ask questions or make comments, the business is easier. They will often do so if the relationship between them and the teacher is that of two explorers who are seeking a fine thing and wish to share their finds. They will not do so if they feel that it is the teacher's job to point out beauties and theirs to dully acquiesce.

If the teacher can read well, he will sometimes read verse to the children, which, although they cannot understand it, will please them by its sound. At least one schoolmaster has found that elementary school children enjoy hearing Milton, Swinburne, and even Latin and French verse, although the meaning is far beyond them.¹

In many cases a method of contrast and comparison is very useful. The children can feel at once the difference in mood between *Sea Fever* of Masefield and *The Lake of Innisfree* of W. B. Yeats ; and *Up the Airy Mountain* and the first stanza of the Choric Song in *The Lotus Eaters*. Aware of the difference, some children at least are anxious to investigate farther, and find phrases, words, lines, which give the feeling of the verse. Some children interpret verse in movement—a crude kind of eurhythmics. Children of seven and eight enjoy walking, dancing, tripping, and galloping and so on to the "tune" of *Tewkesbury Road* (Masefield), *Come unto these Yellow Sands, Over hill over dale*, and *How they brought the Good News from Ghent to Aix*. The question of illustration is dealt with elsewhere.

Every appreciation lesson should end with the reading of the poem itself, so that it has the last word with the children ; and they should have easy access to it for many weeks afterwards—if possible, in some form which they can keep always. The worst impression to leave is that the poem is "done". Far better to leave the children feeling that they had just *begun* to enjoy it.²

¹ v. Greening Lamborn, *Rudiments of Criticism*.

² A good guide for an appreciation lesson is in Nancy Catty's *Training in Appreciation*, p. 60.

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Their own silent or oral reading of the poem is a valuable part of their experience. It will naturally be influenced by the teacher's reading, although many a child has said that he "heard it in his head" differently from the way in which anyone has said it, or he could render it himself.

The ideal condition for learning by heart is that the children should want to learn. In many cases they do, and they should always if possible be given a choice. In the Recitation lesson the teacher should distinguish between hearing the poem as a test of its being learnt by heart, and hearing it as the child's interpretation of it. As a rule, the dull monotonous repetition of the verses spoils the poem for ever for many of the children. As a test of memorizing, writing the poem out, or saying it to one's neighbour, is best ; when the poem is recited to the class all the attention should be on the rendering. The criterion of good or bad must be settled by "does that tell us what the poet meant to say ?"—never by "Was that how teacher said it ?" Variety of intelligent interpretations will naturally be encouraged. The wider the choice allowed to the children in their work the more interesting will be the Recitation lesson.

But the surest means of appreciating technique is to imitate it. Children in the lower standards make verse more easily than do their untrained elders. It is best to begin with an easy model—nursery rhymes, *John Gilpin*, *Up the Airy Mountain* ; let the children beat time to it, and make sentences or phrases that will fit the beats. It is sometimes helpful to suggest a subject. The beat is the all-important thing. Rhyme is added afterwards, and if the children find difficulty here, rhyme games, e.g. "I spy spy, with my little eye, something that rhymes with ——" are helpful. Every teacher who has encouraged her class in verse-making knows how easily most of them take to it, and with what delight they pursue it. As a training in technical appreciation it is excellent. It is also splendid discipline in the

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uses of words. Plenty of examples of children's work are published.¹ Only in a few cases are the results poetry. That does not matter. It is the by-products, appreciation of a craft by trying to do it and a knowledge of the available material, that are the valuable outcome of verse-making.

In adult life, prose forms the bulk of our reading. If we see our neighbour in bus, train, or tram reading poetry, we consider the fact unusual. Newspapers, magazines, novels, biographies and books of travel are the daily entertainment of most of us. The aim then of the schools in this connection is to give standards of judgment, and a taste for the best.

Up to the present too many elementary schools, pressed by a "now or never" feeling and the knowledge that their pupils will leave at fourteen, inflict upon them books which are far beyond their years, and require these books to be read so minutely that nothing but boredom results. If Scott pursued vendettas for all his novels that the schools have spoilt, he would be occupied to eternity!

Silent reading is now so common in the upper classes of schools that there is not the same danger as previously of the inert "reading round", while the intelligent children read on ahead and hope their neighbours will prompt them if they "don't know the place" when called on to read.

The older children should have access to a variety of books, in which there should be some easy ones for the slower children. It is essential that these "private reading books" should be well printed and, if possible, illustrated, since the child has to depend on his own desire to get him through the book. The books should be well cared for and as beautifully housed as possible. The teacher will from time to time talk with the child

¹ v. W. S. Tomkinson, *ibid.*, pp. 79 *et seq.* Perse Play Books. Fletcher, *Children's Poetry Book*.

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about the books he reads, or set composition subjects in which he can use what he has learnt. The younger children too can read silently; in many cases one section is always doing so while the teacher helps the backward readers.

In addition to this reading every class should study some prose work. The most successful method is that in which the children read most of the book silently for themselves, and oral lessons are taken at intervals to discuss different aspects of the book—the story, the characters, the setting, the tragic parts, the humorous parts, dialogue, etc. For all these lessons the children should select their own examples, and be prepared to read them well. Here is a splendid opportunity for practising reading aloud as a fine art. Little children are greatly helped if the teacher reads some parts to or with them.

Before they leave school, the children should certainly be acquainted with the useful art of skipping, speeding up one's reading, or getting the gist of a book from chapter headings, and should have practised using books for different purposes ; the History text-book, the Bible, a novel, and *Who's Who* require different methods. Too frequently children are only acquainted with one method—the plodding one, from the first to the last page !

At all stages the teacher will frequently read stories and essays aloud to the class, and tell them stories. He will show interest in the children's home reading, and acknowledge the existence of *The Rainbow* and *Comic Cuts*. To supplement these, and prepare for the time when their sway will have passed, he will introduce to the children periodicals of greater literary worth. He will influence the children and officials where he can in the choice of Sunday School prizes and public library books. He will especially, by example and enthusiasm, encourage the children to buy books of their own.

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The quality of abridgments and of stories in foreign or difficult prose "written down" for children varies so much that it is impossible to generalize about them. Every teacher here must be his own judge—which requires that he should himself know the original ; or, in the case of foreign works, a good literary translation of it.

As in poetry, creative and imitative work on the part of the children is essential to their true appreciation of prose. By attempting to describe for themselves a Christmas journey, they will appreciate and be helped by Dickens' description of one. After reading Scott's description of the tournament in *Ivanhoe*, they can emulate him in describing a modern combat—in football or basket ball. Description, dialogues, can all yield their quota of new words and turns of phrase to the "sedulous apes" whose interest is aroused in them.

Children of their own accord dramatize stories and the activities of adults. They play "Three Bears", "House" and "School" without any prompting from the teacher, whose work therefore is to raise the children's standard of drama and to extend their knowledge of it.

In the lower classes of the upper school, dramatization of stories is a frequent consequence to Literature, History, Scripture and Geography lessons. By degrees the children should learn, not merely to dramatize in a loose, shapeless way, but to fit the story into the form imposed on it by a *play*, i.e. they will have to select, alter, extend or diversify their material to suit the requirements of place, time, and unity of action. Some stories, such as that of *The Pied Piper*, fit almost without alteration into play-form. The speeches are given, the characters ready drawn. Some stories of Hans Andersen, such as *The Travelling Musician*, are almost equally easy material.¹ By the time they reach the top standards the children should thus have discovered for themselves

¹ v. the authors' *Pattern Plays*, pub. Nelson.

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and have tried to deal with the technique of drama. It is unfortunate that the cost of modern plays prevents most schools from using them ; for there are several, such as *Abraham Lincoln* and *Oliver Cromwell* of Drinkwater, *Seven Short Plays* of Lady Gregory, and one or two of Barrie that interest children and make them feel that school work is a part of the life around them. As it is, the schools fall back on Shakespeare, Goldsmith and Sheridan.

There is a good deal in any Shakespearean play that is unsuitable for children. Even in *A Midsummer Night's Dream* one is wise to cut nearly all the Hermia-Helena-Lysander-Demetrius scenes. The average child at the top of the elementary school needs a good deal of tactful help to enjoy *Twelfth Night*, *As You Like It*, *Henry V* or *Julius Cæsar*. In the later plays the language is so involved that many children cannot follow it easily, although, if their ears are trained, they may appreciate hearing parts read.

The teacher will bridge the gaps between the scenes he has chosen for class reading by narrative and quotation. He will remember that the play was written to be acted and that character and dramatic situation are best studied and appreciated through attempting to act them. Knowledge of costumes, grouping, gesture, the memorizing of many passages, and above all, training in team work, are not negligible by-products of a class-production of a play. The ill-effects of children's acting are shown when they are made to act frequently to adult audiences. These productions are so entirely in the teacher's hands, put such a severe strain on him and on the children, and necessitate so much wrestling with practical details, that they should be few and far between. The educative production is a simple one, worked out by the children themselves as a means of appreciating the play.

Concurrently with the acting of plays the children will make them, or add to those they are studying. The

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attempt to write "Additional Scenes for Shakespeare" teaches more about Shakespeare's manner than a month's talking on the part of the teacher.

In studying plays only the explanations and backgrounds that are necessary should be given. The days of half a page of footnotes to the first two lines of *Hamlet* have luckily gone by ; neither does authority demand "meanings and allusions". The clever teacher manages to make Shakespeare's meaning clear without overlaying him with information. The child soon realizes that if he is to act a part he must know what the speeches mean. He feels the need which the teacher opportunely supplies.

And, let us realize that a well-read adult finds difficulty in reading Shakespearean blank-verse at sight. If children are to read in parts they must be given time, perhaps in silent reading lessons, for preparation of their speeches.

Throughout all our teaching let us remember that appreciation of any art is caught rather than taught. What the teacher sincerely loves, others will love, and he will find it easy to show them how. Humbug and indifference shall not be forgiven in the teacher of literature, for by those sins are children deprived of their inheritance.

QUESTIONS FOR DISCUSSION

- 1.—What principles of selection have you in mind when you choose poems (a) for little children to hear and learn ? (b) for children of 11-14 years to appreciate ?
- 2.—What is your attitude to the literature you studied in school ? What caused the growth of this attitude in you ?
- 3.—How would you grapple with children's tastes for "comic" papers and unreal "school yarns" ? and later with the adolescent delight in the "shilling shocker" ?
- 4.—Make a list of the books you most enjoyed in your early 'teens and say what elements in them attracted you.
- 5.—Describe any short dramatic activities that you have seen that have quickened appreciation of good drama.

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- 6.—Do you think the charge is true that "not more than one-third of the students leaving training colleges are really qualified to take English with a class"? (See Report on Teaching of English in England, p. 171.)
- 7.—Where do you feel that your own weakness lies as a teacher of English Literature? Can you suggest any causes in your education or personal tastes for this weakness?
- 8.—Describe your ideal teacher of English Literature.
- 9.—Examine any syllabus in English Literature which you can obtain from an elementary school. Try to find out the principles on which it has been made and show its good and weak points.

BOOKS

W. S. TOMKINSON, *The Teaching of English*.

E. A. GREENING LAMBORN, *Rudiments of Criticism*.

Expression in Speech and Writing.

CALDWELL COOK, *The Play Way*.

GEORGE MACKANESS, *Inspirational Teaching*.

The Teaching of English in England. (Report of the Departmental Committee.)

QUILLER-COUCH, *The Art of Reading*.

The Art of Writing.

W. MACPHERSON, *The Study of English Literature*.

E. C. OAKDEN and M. STURT, *Pattern Plays*.

THE HUMANITIES

"There is more in heaven and earth . . ."

"THE modern school's business is to impress into the service of man every branch of human knowledge we can get hold of." This is the dictum of Sanderson of Oundle. He explains it farther. Knowledge—bare knowledge—is not an end in itself. Man is the subject of knowledge, and to understand man, and nature as it affects man, is the aim of education. He has put the matter concretely in another passage of the same lecture apropos of a particular study, and what he says of one problem he means to be true of all.

"An important question which we have been concerned with for at least three years is 'What is China? What is it like?' You may say 'Methods of teaching geography.' But who ever learned anything from geography—as geography? Who wants to know geography, as geography? Books exist for it, maps, plasticine exist for it. We want to know about China. . . . We shall not get what we want from the geography books. We shall have to take the boys and let them find out what men have done who have been in China; to get products from China; to know its geology, and whether, after all, the Chinese do so deeply love rice that they want to live on a very little a day. Do the Chinese love rice? Do they love underselling white labour? Do they want to? That is real geography, but not class-room geography. . . ."¹

If the object of Geography is to find out how people live to-day and why they do it, History would be the study of the men of the past and the conditions of their lives then; and these two studies might be called the

¹ *Sanderson of Oundle*, p. 363.

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Humanities because their subject matter is human life and their method scientific, only in the sense that Psychology is scientific, that is to say scientific in that it collects data and tries to generalize from it, but not fully scientific because its generalizations are always provisional, and subject to the unexplained element of will or perversity in human nature.

The conception of History and Geography as humanities in this sense comes hardly to many who are deeply interested in them. There have been many attempts to found a "science of History" and much Geography is truly scientific. The Science of History is probably a delusion, but maps and survey, latitude, trade winds and average rainfall are realities of the highest importance for human life. And, moreover, when attempts are made to teach Geography without these hard facts—as is done in the lower forms of schools—the subject degenerates into the telling of inaccurate stories. The scientific side of Geography is an integral part of its human side—not a separate department. It is the separation of the two sides that has brought about the trouble.

History and Geography re-entered the elementary school curriculum together in 1871 as "specific subjects of secular instruction", and the company they keep in Schedule IV is curious. The Code runs :

"If the Time Table of the school has provided for one or more specific subjects of secular instruction beyond Article 28 (which laid down the work in Reading, Writing and Arithmetic) a grant of 3s. per subject is made for every scholar presented in St. IV-VI who passes a satisfactory examination in not more than two of these subjects."

Schedule IV laid down the subjects and subsequently gave specimen syllabuses.

"The specific subjects of secular instruction may be Geography, History, Grammar, Algebra, Geometry, Natural Philosophy, the Natural Sciences, Political

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Economy, Languages or any definite subject of instruction taught to St. IV-VI by a graded course well adapted to the capacity of the children and sufficiently distinct from the ordinary Reading Book Lessons to justify its description as a 'specific subject of Instruction. . . .'

"Drawing and Music will not be accepted."

In 1875 class subjects were introduced with an appropriate grant. The sum of 4s. per child to be paid on average attendance was offered "if the *classes* from which the children are examined in St. II-VI, or in specific subjects pass a creditable examination in any *two* of the following subjects, viz.: Grammar, History, Elementary Geography and Plain Needlework". The list of specific subjects was revised at the same time and lost its most amusing members. It became Mathematics, Latin, French, German, Mechanics, Animal Physiology, Physical Geography, Botany, Domestic Economy.

History and Geography are still treated as being exactly on a par. Both receive about an hour a week, generally in two half-hour lessons—and they are always spoken of in one breath. There is a psychological as well as an historical reason for this—both should serve the same purpose. They are not directly useful for their content, but they satisfy a natural and very widely spread curiosity, and if taught successfully they should extend the mental horizon. The Londoner standing by the river should be able to look South and think, "Yonder lies the sea, and beyond warm lands where there is no fog"; and he should be able to picture the procession of boats through the ages, Olaf's long ships moving up under shields of cow hide to break down London Bridge, or a state barge of the sixteenth century bringing a traitor to the water gate of the Tower. Moreover, if the teaching is carried farther, as it can be in a secondary school, it should involve some real understanding of a country other than one's own and should

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prepare the way for a study of the complex problems of our own industry and politics. But this is beyond the scope of the elementary schools.

In many subjects it can be said that formal education has touched only to destroy, and this is largely true in History and Geography. Before these subjects were made part of the school course they were understood to be what they are, interesting extensions of knowledge intended mainly for the entertainment of readers. The first European history is that written by Herodotus, and it is one of the most attractive books ever written. It is not strict history, it is full of geographical details ; there is a long speculation as to the reason why the Nile floods in summer when other rivers are low ; there are stories which the author does not vouch for but only repeats "as they were told to him" ; there are character sketches of princes and anecdotes of wise men. Odysseus, who had "known many cities and races of men" might have talked so by the fireside to Telemachos and Penelope. Herodotus had travelled about the Mediterranean and he had talked to those who had travelled farther, and to the priests and keepers of the records of cities.

Real history began with Thucydides, who, in his compulsory retirement in Thrace, put together the history of the long war that had ruined his city and led to his exile. Thucydides writes sternly, and he writes of things he had seen and the deeds of men he had known. The treaties he quotes were taken from the stones which recorded them, the speeches he wrote up were many of them delivered in his presence. Yet, though what he writes is sober history, he never for a moment forgets the other purpose of his writing. He writes as a literary man addressing a world which will hearken for an interest in the events and the love of a noble style. From Greece, through Rome to the days of Gibbon and Macaulay this historical tradition held. However careful the research which preceded it, historical

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writing was an art presided over by a Muse, and Motley, Prescott, and Froude are as estimable for their literary skill as their knowledge.

At the beginning of this century something happened. There are a few historians to-day who keep up the old tradition, but many excellent treatises are chronicles of fact rather than works of art. A man in search of interest might well sit down and read some of Prof. G. M. Trevelyan's books with enthralled interest, he would not get far with the Cambridge Modern History and maintain the same mood.

The great historians are naturally not within the ken of little children, and if children are to learn the facts of history young, these facts must be heavily selected and those chosen presented in a simple form. Then comes the question, what ought a little child to know? And in a monarchist age the natural answer was "The kings and queens of England". We are used to this starting point of knowledge. It has an advantage—it gives us a scheme of dates, but to-day it is very difficult to see what other recommendation it possesses. Kings and queens mean very little to us now, but when children first began to learn lists of the kings and queens of England the monarchy was a more real thing, and adults may have felt that through this gateway all knowledge lay, just as the Catechism was once the acknowledged introduction to religion.

Children learnt the kings of England as early as 1622, and learnt them in rhymes as that was pleasanter and easier to remember. It is a further proof of the conservatism of education that Mr John Taylor in that year picked out for emphasis the same salient facts that the school boy learns to-day. Of Henry VIII it is recorded :

A valiant champion for the Faith's Defence
Was the great tytele of this mighty prince.
Six wives he had, 3 Kates, 2 Annes, one Jane,
Two were divorced, two at the block were slain.

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And of Richard III :

By treason, mischief, murder and debate
Usurping Richard won the Royall state.
Unnaturally, the children of his brother
The King, and Duke of Yorke he caused to smother,
For Sir James Tirrell, Dighton and Blacke Will,
Did in the Tower these harmless Princes kill.

But in the stern educational days of the nineteenth century such learning was too superficial. Moreover, a new education method had been invented—on the model of the catechism—by which the pupil learnt question and answer and recited the two together. The field covered was wide and only a knowledge of the answer intended would enable a child to deal with some of the questions. The most glorious example of the method was *Mangnall's Historical and Miscellaneous Questions for the Use of Young People*, of which the title page of the 1869 edition states :—“ A period of sixty-three years has elapsed since the fifth edition of Mangnall's Questions was sent forth by its Author, who was a skilful instructress of her time.”

The questions are concerned with “ History from the beginning of the world to the present day with sections on Greece and Rome, France, and many on England. The British Constitution, elements of astronomy, with an explanation of terms, miscellaneous questions on common objects.”

The style of the book can be gathered from a few extracts :

“ *What is the meaning of the word chronology?* Its simple meaning is a *discourse on time*, as it comes from two Greek words, one of which (*χρόνος*, chronos) means *time*, and the other (*λόγος*, logos) a *discourse*.

“ *Who founded Rome?* Romulus, its first king, 735 B.C., who was worshipped as a god by the Romans after his death in 716 B.C.

“ *How were the Roman soldiers punished for small deviations from duty?* They were always bled ; for as every ancient Roman entertained high ideas of his own

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prowess, this temporary deprivation of strength was to them the most sensible mortification.

"*What rule was observed inviolably with Roman Armies?* This : he who abandoned his post or quitted his arms in battle, suffered death.

"*Who was emperor when Christ suffered death?* Tiberius, famed for his cruelty and dissolute way of life.

"*What are the customs?* Taxes paid to Government on goods exported and imported.

"*What is a bill of entry?* An account of goods entered at the custom-house."

Further questions are :

"*What are the principal characteristics of metals?*"

"*What are the perfect metals?*"

"*From what countries do we obtain platinum?*"

"*What is spermaceti?*"

"*What is vermicelli?*"

Gamboge, indigo, pounce, paper, putty and leather are also dealt with among other "common subjects".

To anyone with an interest in facts, or fictions, Mangnall's Questions makes quite good reading to-day, and any girl who knew them might easily have won admiration from her men friends by the width of her knowledge and the justness of her expression. For naturally, in its day, Mangnall's Questions was a girl's text-book. Her brother was occupied with classics and fighting in the unreformed Public Schools and might be able to cap Latin quotations but would hardly be competent to explain a bill of entry or give the principal characteristics of metals in three lines.

Geography has passed through similar stages except that it has a practical side, which History has not, so that concurrently with the writer there has always been the practical man, soldier or merchant, who has put his knowledge to use. Of the writings of the man who sat at home Mandeville's *Voyage and Travail* is a good example ; therein is a strange medley of quite correct

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facts about the Mohammedan faith and customs or routes to Jerusalem, together with tales of dragons who inhabit islands or men whose heads grow under their shoulders. When Marco Polo came back to Venice after his years of service at the court of the Grand Khan he was so pestered by people asking him of his adventures that he took advantage of his leisure in a Genoese prison to dictate a complete account to which he could refer the curious. The third type of Geography was the little note book that Alonzo de Contreras, a Knight of Malta about 1600, carried ever in his pocket in which he had set down all the harbours of the Mediterranean.

Perhaps it is because we are a seafaring nation that it was the third type of Geography which became traditional in our schools. There is nothing but convention to explain the fact that almost till to-day, or even to-day, children who may never have seen the sea are asked to learn a list of the "Capes and Bays" of England or Europe.

Nor did Geography lack its poets to make rudiments "attractive". Mr William S. Sankey, A.M., had a richer style both in verse and prose than his contemporaries.

"Young persons, or others, may find even a technical advantage in acquiring a knowledge of the outlines of Geography and History through the vehicle of rhyme, and that independent of any gratification they may receive from the pleasure which corresponding sounds afford the ear."

He did not wish to teach the young the corrupting history of wars, so he plunges into the innocent ocean of Physical Geography :

Where earth in larger masses lies,
As stretching onwards to the skies,
Continuous still, for many a day,
As Eastwards, towards the rising ray,
Or Westward, to the setting sun,
Or North or South we journey on,
Such masses are, by old consent,
Called by the name of Continent.

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Such learning taught only the chief names in use in Geography—ocean, island, isthmus—and these were considered the proper knowledge for the young.

The wider geography did not however cease to be written.

Men voyaged and recorded their experiences. In the pages of *Purchas' his Pilgrims*, or the records of those who travelled with Drake or the relations of Cook's voyages, can be found the true geography, and any child who wished could read such books—and many did.

When, to this well-intentioned confusion, organization succeeded, the teaching of History and Geography became worse. There was no longer a sharp division between certain necessary rudiments to be learnt—perhaps in verse, and the wider fields of interesting reading ; a text-book undertook to teach “ all the requirements in Reading, Spelling, Dictation, Arithmetic, Geography, Grammar and History of the Revised Code 1875 ”, and the child learnt the book appropriate to his standard, and must be prepared to pass any examination that an H.M.I. thought fit to inflict.

Mr H. Major produced a number of books, graded each to a standard, and any child who had mastered them could be guaranteed never to take any further interest in any of the subjects dealt with in them. One of these books, intended for Standard V, starts with passages for Reading :

“ The incidents in history that have been selected for reading in the Historical and Geographical reader are such as possess in themselves a graphic interest, capable of arresting the attention of children of the age of those constituting Standard V in our elementary schools; while it is hoped that the Geographical pieces will become word pictures in the memories of the readers, and afford them delight, not only in perusal, but in after time, when quiet thought succeeds the active business of life.”

This is, of course, a laudable hope, but the jumbled collection of pieces, arranged without regard to

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chronology or subject, would scarcely be potent enough to fulfil the hope. There are included :

<i>The Death of Nelson.</i>	Southey.
<i>Waterloo.</i>	Byron.
<i>Falls of Niagara.</i>	Wadson.
<i>Armada.</i>	Compiled.
<i>Spanish Armada.</i>	Macaulay.
<i>Dying Gladiator.</i>	Byron.
<i>Spanish Armada.</i>	Bulwer.
<i>Columbus.</i>	Irving, etc.

Such a series of readings might serve as an introduction to the more formal instruction in History and Geography to come later in the book, but it does not. Indeed, nothing fits in the work ; and the frontispiece to this noble collection of heroes is an engraving representing three rabbits eating a large and unidentifiable vegetable.

There follow :

Table of aliquot parts.

Practice, compound practice, bills of parcels, metric system.

Grammar.

Parsing and analysis of sentences.

Parts of speech (three kinds of adjectives and seven kinds of adverbs, etc.).

Geography.

This is the style :—

“ EUROPE PHYSICAL GEOGRAPHY

I. Extent and Boundaries.

Length from N.E.—S.W., 3,400 miles, and breadth 2,400 miles, area 3,700,000 sq. miles.

Boundaries : On the N. by the Arctic and Atlantic Oceans, S. by the Mediterranean Sea, Bosphorus, Sea of Marmora, Strait of Constantinople, and Caucasus Mountains ; E. by Caspian Sea and Ural River and Mountains ; W. by Atlantic Ocean.

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2. Inland Seas, Gulfs, etc.

(a) The Mediterranean : with which are connected the Gulf of Lyons (France) and the Adriatic Sea or Gulf of Venice (Italy) in the South.

(b) Black Sea : with Sea of Azof in the South.

(c) Atlantic Ocean : with the German Ocean and Baltic Sea in the West and Centre.

(d) Arctic Ocean : with White Sea in the North.

3. Coast Line.

Greater than that of any other Continent in proportion to its size, 20,000 miles. The wealth, power and civilization of Europe largely due to its extended coast line."

Then follows a list of countries, capitals and populations, capes, rivers and their drainage, lakes, mountains, minerals, races, plains, plateaux, peninsulas, rain, winds. (Notice the order !)

“ POLITICAL GEOGRAPHY.

France.

A Republic ; in the West of Central Europe, with an acreage of 129,154,450. Divided into 34 provinces, and 87 departments. Chief rivers, Seine, Loire, Garonne and Rhone.

France possesses settlements in Africa (Algieria), Asia and America.

Forest trees: oak, birch, pine, beech, chestnut and cork trees. Fruit trees: olive, chestnut, walnut, almond, apple, pear, citron, fig, etc. Chief forest districts are Ardennes, Compiègne, Fontainebleau, and Orleans. Vineyards abound in Bordeaux, Burgundy, and Champagne. Minerals: iron, copper, lead, silver, antimony, coal."

Other headings are "Manufactures", "Army", and "Education : Presided over by a Minister of Instruction ; improving", "Religion : Roman Catholic", etc.

And so through the other countries—two pages each.
Total—24 pages !

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"ENGLISH HISTORY

St. V, 1066-1485

TABLE OF SOVEREIGNS OF ENGLAND

No.	Name	House	Born	Began to Reign	Ceased to Reign
1	William I	Norman	1024	1066	1087

Each is treated in order, as, for example :

HENRY I. 1100-1135

Birth. Born 1068; third son of William I.

Reign. Came to the throne 1100, at the age of thirty-two years, and reigned thirty-five years.

Battles. 1106, Battle of Tinchebrai, Normandy; defeat of Robert. 1119, Brenville, defeat of King of France.

Chief Events. Robert invaded England to claim the throne; peace was however made between Henry and Robert, which lasted but a short time. Henry invaded Normandy, and Robert was confined in Cardiff Castle, Glamorgan, for the rest of his life—28 years. In 1120 his son William was drowned in the White Ship, near Harfleur.

Issue. Matilda.

Famous Men. Louis VI, King of France, assisted Robert. William, son of Robert, Duke of Normandy.

Death. From eating excessively of lampreys."

This is followed by a catalogue of *Famous Acts*, e.g. 1100 Charter of Liberties. 1135 Code of Privileges. *Interesting Events*, e.g. Battle of Hastings. Death of Rufus. Conquest of Ireland. *Battlefields*. A few quotations from Malmesbury and such like. Chronological landmarks. Wives of Kings.

Total, 28 pages of history.

It is perfectly easy to criticize this scheme as inadequate and uninteresting. Modern teaching of the subjects is of course quite different. History is half biography and half social history: Geography has become "human" and an exercise in reasoning. Yet

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when we come to consider particular schools or particular results it is hard to see that the changes are as great as it is claimed, and the *fundamental* objection to Mr Major's scheme, its disconnectedness, is entirely unremoved. The question, as usual, is complicated by the teacher. A good teacher, as has been said before, can make anything interesting, a bad one will spoil the most perfect scheme in the world, but, as there are probably as many bad teachers as there are good, criticism of bad methods is justified. We can moreover speak by the result of experiment. In an elementary school in a good district children aged ten to eleven were asked to complete the following blanks :

- (1) The occupations of the English in the time of Charles I were.....
- (2) Their food consisted of.....
- (3) They lived in houses made of.....
- (4) Their chief city was.....
- (5) When they went to war the weapons they used were.....
- (6) When they were at peace they wore on their bodies.....
- (7) On their heads they wore.....
- (8) On their feet they wore.....
- (9) They worshipped.....and to please him they.....
- (10) The language they spoke was.....
- (11) We know about them because they have left.....

There was an exactly similar blank dealing with the Romans. This is the result of this experiment :

"The marking of these blanks was necessarily difficult, but it was all carried out by one person, and every effort was made to keep it uniform. The papers were marked in five grades : G (good), F +, F (fair), F -, B (bad). To be B the completion had to bear no reference to the period indicated, e.g. attributing to the reign of Charles I the mud huts and human sacrifices of the Ancient

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Britons. F showed a passable, though generally vague knowledge of the period, G a really definite one.

"The papers from the Elementary School were surprisingly bad—no one scored G, the greatest number getting F or F—on the Romans, and B on the English. The reason for this was that the answers were in a large measure identical in the two cases, and the 'sandals' and 'idols' fitted the Romans rather better than the English. The tests were separated by a week's interval, and the difference in period carefully pointed out. The complete failure of the children in the Charles I test is all the more remarkable as they had been receiving lessons on the social life of England in the time of the Stuarts during the whole term!"¹

Either the teaching in this school is uniformly bad or there is something in the matter taught which is unsuitable to the children. Again, in the matter of chronology, there was an amazing amount of ignorance displayed.

"On the blackboard was written :

Attila lived in Hungary in A.D. 438.

Philip lived in Spain in A.D. 1585.

Nero lived in Rome in A.D. 50.

This was read out to the children and they were told to write down the names of the people in the order in which they lived, 'beginning with the one who lived longest ago—furthest away back in history' . . . The results were :

Age	No. of Children	% answering correctly
8	45	51
9	75	61
10	57	67
11	52	89
12	40	85
13	28	96

The figures would have been much lower if the experiment had been confined to elementary schools.

¹ Mary Sturt, *Psychology of Time*, p. 61.

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"The majority of errors show real ignorance. They were mainly inversions; and when reasons were demanded the most usual reply was, 'Philip comes first because his number is bigger.' This error was complicated by the fact that some children did not know when the number *was* bigger, e.g. in another problem of the same kind, 1898 was often thought to be bigger than 1901. . . .

"The utter confusion of a few of the children can be gathered from the following answers to questions: M.D., aged 10, School A, 'Nero lived 50 years ago, Dante 1312, therefore Dante lived first.' P.M., 10, School A, 'Why do you think Attila lived after Philip?' 'I just guessed; I had nothing to guide me.'¹

To go from the results to the actual teaching, countless lessons every week are given on something like this plan:

Who was I talking about last lesson? Aethelred.

What was he named? The Unready.

Why? Because he did not fight well.

Whom did he fight? The Danes.

Now say that all together. (It is said.)

To-day I will tell you about another king, and his name was Alfred.

What was his name? Alfred.

Say it all together . . .

and so on with the story of the burnt cakes and much repetition of the names of Alfred, the Danes, and of the story.

Such a lesson is as misleading and inadequate as any of the old days. It is hardly any more interesting. The cakes were not Alfred's real title to fame, and many a well-educated person learns with surprise, long after he has left school that Alfred was an important literary man and founded the navy, which thus became the "senior service".

It is much the same with Geography. The changes are largely superficial and the results far from satisfactory.

¹ *Op. cit.*, p. 54.

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Mr James Fairgrieve in his book, *Geography in School*, devotes a chapter to showing the kinds of mistakes made by children who "have taken geography as a chosen subject after a secondary school course". Their scripts in examinations of the standard of the first public examination have been used in evidence. If the ideas of these candidates are confused, what must the geographical thoughts of elementary school children be like? These mistakes are not mere errors of fact, they are the use of phrases which suggest totally wrong ideas, e.g.:

"Monsoons are caused by the warm air rising and the cold air rushing in to take its place."

"The East of England is sheltered from excessive rain by the Welsh mountains."

"The West of Scotland is so indented because the rough Atlantic waves have worn away the land."

"The Nile flows up to the Mediterranean Sea."

"Plymouth is able to watch all the strange ships that pass through the English Channel."

"In Manitoba, if the summer is very dry they are able to get water from Lake Winnipeg."

"Canada is one of the countries owned by Britain."¹

To detect the full fallaciousness of these statements one needs to know much Geography and, in the last case, a little History. Above all, one needs to have realized the facts of Geography, and that is difficult to do without personal experience of the thing or something very like it. Hence, Geography is possibly the hardest subject in school to teach well. The experience of children, especially elementary school children, is very narrow, and often their teachers have not travelled far, perhaps to the north coast of France or Switzerland in the summer. This is too small a basis for real geographical understanding. What does the dweller in England know of the stark white light of the Mediterranean lands, or the drought of a desert, where a shower of rain dries

¹ *Op. cit.*, Ch. III.

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in mid air and never reaches the earth ? What does he know of air so clear that at twelve miles every ridge and cranny in the cliffs is sharp and well defined, or of the thin, chill, infinitely invigorating wind of the high snows ? These things *are* the places, and they are not mentioned in the Geography books, nor can they be realized in a class-room.

At least there is human Geography and stories of other lands. The average lesson of this type given to Standard I or II is the most grotesque parody of facts—far worse than the dry learning of names and places. Human institutions to-day are far more homogeneous than countries and climates, and the teacher in his efforts to arouse interest emphasizes all the differences and omits the similarities. He talks about the Chinaman's pigtail, which has been largely discarded, and never alludes to the American horn rimmed spectacles which are about as common there as in England. Any child who went to China or to Holland, or even to Ireland, would be utterly unprepared for the ordinariness of what he saw. There is a nursery rhyme that fits the case very well.

There was a naughty boy,
And a naughty boy was he.
He ran away to Scotland,
The people for to see.

But he found
That the ground
Was as hard,
That a yard
Was as long,
That a song
Was as merry,
That a cherry
Was as red,
That lead
Was as weighty,
That four-score
Was still eighty,
And a door was as wooden as in England.
So he stood in his shoes and he wondered,
He wondered, he wondered,
So he stood in his shoes and he wondered.

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This child had almost certainly been having lessons on the "Life of the little Scotch boy, Mac!"

As soon as this stage is left behind, the teacher of Geography reverts at once to Mr Major's scheme. To-day he provides himself with maps and apparatus, perhaps even a few pictures ; but a set of lessons proceeds on exactly the same lines and the information conveyed at the end is precisely similar. Take four lessons on Wales given by a really good teacher. The first was position, extent, boundaries ; the second mountains, rivers, chief towns ; the third, products and occupations ; the last, communications. At the end the children were just a little less wise than if they had learnt Mr Major's summary, and in addition they had rather enjoyed themselves—so there was that much gain. On the other hand, of true Geography, as defined by Sanderson, they had learnt very little. They had been told that the people of the Welsh coast were fishermen and inland they were sheep farmers. To a town child that does not convey much. To be effective the knowledge must be much more detailed. The important thing is not that men fish but *how* they fish :—what size and shape their boats are, what time of day they start out, what lines and nets they use, what the particular dangers are, what they do with the fish when they have brought it home. The mere statement that men fish is quite devoid of true interest, but the reality, when one lives among fishermen, or even as a visitor sees the boats putting out at sunset, or admires the shining fish spread out on the quay next day, is fascinating. Even the cats who live on the offal and spend part of their time fishing the gutters for scraps, are a peculiar and characteristic race.

Geography, even as taught to-day, is not really *human*, neither does it involve as much "reasoning" as its advocates imagine. It is possible to ask class after class of children some such question : "It is hot and wet in this land, so what will be the vegetation ?" and get a triumphant chorus each time "Forests". That is

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not reasoning. It is mere parrot memory : and so with answers about mountains and rain, or a dozen other facts of Physical Geography. What these answers mean to the children it is impossible to tell ; but if the mental image follows the words, any range of hills must be imagined as running with perpetual downpours. They would be nearer the truth if they had been taught nothing at all about the effect of altitude on precipitation.

At one time, and perhaps to-day, there was much talk of the "reasons" for towns being where they are. Geography papers abounded with questions in the form, "Where is London, and why ?" Again, there was no "reasoning". The child either knew or else applied a simple formula. The answer required must be because it is on a navigable river, or is in a gap of the hills, or is a centre of old trackways. London is on the river, therefore that is the answer—and it generally was. This type of reasoning was quite as false as the other, and many children felt it. They know, perhaps, inarticulately, that historical considerations are really decisive ; that London is where it is, and not a few miles somewhere else, for reasons which are not geographical at all ; and that the reasons why it is the capital of England go back to countless chances of wars and princes, and not to strips of rising ground or estuaries. It would not have been the capital without these advantages, but these advantages, without historical chance would never have raised it above the status of, say, Southampton.

If Geography is to be taught satisfactorily, it must break away from the capes and bays and the capitals of Europe tradition, and also from the more extreme forms of the "training in reasoning" theory. Geography must be looked at as the study of the stage on which the human drama takes place, and History as the drama. If this is so the two must be presented together. The present method is uncommonly like a theatrical representation in which we have alternately the empty stage, set for *Tannhäuser*, and the scenes, played against space,

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of *The Skin Game*. Both are impoverished, but the stage setting is reduced to inanity, while the play has a little life of its own. So in school, History is largely incomprehensible without Geography, but the bustle of nations and the tramp of armies keep some life in it ; but Geography, an inaccurate description of the Veld, or a dull discourse on worn or folded mountains, is nothing at all. It is not enough to teach historical Geography, or to garnish Geography lessons with scraps of History. The union should be complete since both are one story, and only thus can either have its full life.

This makes provision for the economic and descriptive Geography, but not, it may be said, for its scientific side. This is partly true. The scientific side of Geography assorts ill with the other, and the combination of the two is always a difficulty. So much so, that many teachers really separate them, and devote a year specially to Physical Geography. Such a division might still stand, but much of the scientific side is naturally included under this scheme ; in particular, maps. An understanding of maps is essential to understanding History and Geography, and the power to "read" an ordnance survey map is of great advantage in life. If Geography—as taught at present—did nothing else but teach people to read maps, it would be a most important subject. But in most cases it does not do this. A large number of educated people can look at a one inch to the mile survey, and be none the wiser, still less can they find their way through unknown country with the aid of one. From a map on a smaller scale they learn only the relative positions of the towns, but what these positions mean, when translated into terms of railway journeys, they do not know. Even where maps are better understood the impression left in the mind is frequently misleading. Take an example—altitude. Few people realize how flat the world is and how little elevation they would see when looking at a hill coloured on the map a shade of brown. This is often the fault of the maps used

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in teaching in which a profile of the country is given at the bottom, "vertical scale magnified thirty times".

Under the system about to be suggested, formal lessons in making and reading maps would be given separately from the course in the Humanities, but the knowledge so gained would be continually in use and would be applied and explained in ways calculated to impress on children what exactly, in terms of human life and effort, such and such symbols meant. So with other facts of Physical Geography.

An example will show what is meant. Very few children know anything about Arabia. An adult wishing to learn about it from a map has great difficulty, because most atlases omit it from the maps of Europe and Asia, and put it in by itself, on a scale that will just let it fill the page, so that it is difficult to understand its position and size in comparison with other countries. In particular, it is nearly always severed from Syria, and it is very hard to discover why Damascus is the natural capital of an Arab kingdom.

The Geography of Arabia that can be taught to children directly is scanty and not very improving, but join that Geography to the History and a whole new world leaps into being. There is Mohammed, and his life involves an account of Mecca and Medina among its groves, of journeys in the desert and tribal warfare and of the founding of one of the most important religions of the world. Then follow the Arab conquests, and we go "from the Indus to Spain" and see the wild troopers who sing:

We are they who come faster than fate : we are they who ride
early or late.

We storm at your ivory gate : Pale Kings of the sunset beware!
Not on silk nor in samet we lie, nor in curtained solemnity die
Among women who chatter and cry, and children who mumble
a prayer.

But we sleep by the ropes of the camp, and we ride with a shout
and we tramp

With the sun or the moon for a lamp, and the spray of the wind
in our hair.¹

¹ Flecker, *Hassan, War Song of the Saracens.*

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Here we have wandered into literature, if we had not already done so with lives of Mohammed, and we naturally wander farther to the court of Haroun-al-Raschid and the *Thousand and One Nights*.

Then there are the Crusades, the fall of Constantinople, and, after a long interval, the *Arabia Deserta* of Doughty, Burton's *Journey to Mecca*, and Lawrence's *Revolt in the Desert*. Whoever has considered these books and had passages read to him, for a child could hardly read them for himself, has entered into a true knowledge (as far as one who has never felt the burning desert air, or the bitter snow, can have such a knowledge) of Arabia ; and knows not merely the latitude and longitude and the names of the chief ports, but something of the true meaning of the word, the idea of the land in the minds of those who have loved her.

In the course of these lessons Geography has been taught, so also have History and Literature, and they have been taught as one. This is no scheme of correlation in which each subject pursues its own way and methods, merely glancing over its shoulder at its fellows ; it is a real unity and the time table would call the combined subject by some such vague name as *English or Information or Humanities*.

Against such a scheme it is often urged that Geography must suffer because History does not include wide enough area. Those who say this think of History as confined to the British Isles and perhaps Western Europe ; but wherever men have lived there has been "history" and it is History that must resign its insularity rather than Geography its world view. We need not go back to Babylon for our History scheme, but if we start with the Greeks and Romans we embrace the Mediterranean and Western Europe. Mohammedanism gives us Arabia, North Africa, Spain, and, if we wish, India. The early voyages of discovery and the wars with Spain take us to America, North and South, and round the world to fight it out in the English Channel.

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Cook and his contemporaries fight in Canada and explore the Pacific ; the Union of South Africa has a fascinating history ; Burton, Livingstone, Baker and Stanley explored Central Africa. The Duke of Abruzzi climbed the Mountains of the Moon, and Mallory and Irvine died on Everest. Time and interest can bring every corner of the world into such a scheme, and if we hear less than at present about Saxon kinglets and medieval fairs, who is to say that the children are the losers ?

QUESTIONS FOR DISCUSSION

- 1.—Take from a school actual syllabuses in History and Geography and discuss them critically, using (a) those for the same standard and show how far they are suitable for the children and how far they are connected with each other, and (b) those for different classes and show the connection of the course through the school.
- 2.—Sketch a term's syllabus in the *Humanities*, showing what historical, geographical and literary material you would use.
- 3.—Draw up a set of lessons on map-reading and say with what children you would take them.
- 4.—If you had money to buy fifteen books of travel for the reading of children at the top of an elementary school what would you choose ?
- 5.—State quite honestly what the impression left on your mind by History and Geography lessons in school was and what impression you hope to leave on the minds of the children you teach.

BOOKS

JAMES FAIRGRIEVE, *Geography in School*.

J. J. FINDLAY, *History and its Place in Education*.

M. STURT, *Psychology of Time*.

STURT and OAKDEN, *Great Venturers*.

PART II

INTRODUCTION

FOR many years the practice of education was, like Logic, neither an art nor a science but a dodge. What a teacher had to teach was fairly fixed ; its intellectual content was so slight that it was assumed that he was perfectly acquainted with it ; the only question left was his ability to convey it to the class. Teaching method thus became a fetish, and many a book was published of which it might be said :

“ This is essentially a book on METHOD—*how* to teach, *how* to obtain and keep order, *how* to reward and punish. . . . Theory is not altogether ignored, but it is subordinated to practice. The attention of the reader is directed to the actual work of controlling and teaching a class, and the methods by which he may do this.”

Such books as this compressed into a brief 150 pages all the dodges that the writer knew, and were utterly dull. They were, in fact, probably meant to be learnt by heart, and in this were in accordance with the actual school books of their day and those of some fifty years previously.

To these barren compendia in which were set out the thirteen “ marks of good Questions and good Questioning ”, succeeded more ambitious works in which the same material was presented at about five times the length with the addition of much educational metaphysics. Instead of questioning being a dodge, it was now a mystery, which led the teacher and child by means of so-called Socratic Questioning into the very heart of things ; all because the ungrammatical infant had said “ Tom, 'e threw that stone ”, and given a verb two subjects which were really one and the same.

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Method in teaching is an art, and like all other arts has its own technique. One may well study this ; but in studying it one must realize that it is subordinate to the purpose for which it is employed. In painting the same idea can be conveyed by different methods ; in teaching it is of far more moment to have something really important and interesting to say than it is to say it according to any particular formula. At the same time a bad method may completely spoil the best subject matter.

Furthermore, the organization of schools has important effects both on the matter and methods of the teaching. A teacher must adapt his teaching to fit the organization in which he works, he must also consider the organization to see how it can be altered to allow the teaching to achieve its most useful form. Method and organization therefore are subjects which naturally follow a discussion of the curriculum.

CLASS-TEACHING

"Let your clowns speak no more than is set down for them."

IN any school containing a fairly large number of children some method of class-teaching naturally grows up. Children of the same age or attainments are grouped together, and are instructed as a group, while other groups are left to work silently, or if there is more than one teacher, instructed concurrently. But this simple form of class-teaching has gone through many changes. The shifting group, instructed in its turn by the master, gave place to the permanent group under the monitor. In the monitorial schools of about 1820 one master might be in charge of several hundred children. These were divided into more or less permanent groups of ten to twenty and each group was in charge of a monitor. These monitors were the brightest pupils in the school, and generally aged 12-13. They passed on their knowledge to the younger or more backward children and themselves were sometimes taught by the master. This system of class-teaching had nothing to recommend it except cheapness. It was dreadfully noisy, since all the classes had to be in one room so that the master's eye might keep order; the teaching was poor, as the monitors knew little and the master was too busy surveying his insurgent realm to have any thought left for the subject he was supposed to be teaching; none of the more interesting forms of work, and none of the advantages which come from class co-operation or association with a more mature mind were possible.

This was realized after a time, and in 1862 the regulations for grants laid down that after the first fifty children there must be an assistant teacher for every eighty and a pupil teacher for every forty children, otherwise the grant was reduced by £10. At the same

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time the school was divided into six standards and we get the modern idea of a class as a united group of children having a single teacher, a definite syllabus, and having presumably approximately equal intellectual ability and knowledge.

Suppose for the minute that we have the ideal class. It is composed of children of exactly equal attainments and ability. They all know the same amount to begin with and they all learn at the same rate. There are not too many of them, and the teacher is sympathetic and the curriculum is well adapted to their needs. What are the advantages of this type of instruction ?

1. *Economy.* Class-teaching necessitates fewer teachers than individual instruction.

2. *The children derive pleasure and benefit from being in a class.* Many activities are far more pleasurable when conducted in a group than when conducted singly. A good example is the sudden popularity of community singing. To sing alone is pleasant, to sing when one of a thousand is far more inspiring. In the same way many forms of school work become vastly more attractive when shared ; in particular, all those that involve an element of enthusiasm or competition. Emotion is greatly intensified by crowd sympathy, and a well-read poem is often more effective if it moves thirty people than it is if we hear it when alone. In the same way, much dull work is lightened if it be made the subject matter of competition. The learning of simple Arithmetic, Latin irregular verbs, of spelling and tables can all be cheered up, when we have people against whom to pit our skill.

Further, the class is a social unit ; within it there are posts to be filled ; many children can hold office, and learn something of the responsibilities of members of society. There are also opportunities for group activities —the getting up of plays, the selection of teams, the conduct of debates—all valuable means of training individuals for their places as members of a team.

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3. *The average teacher prefers class-teaching, to private coaching, if the class is good.* The reason is that class-teaching is more exciting. It requires more effort, and yet at the end one is not usually so tired as after a similar period of coaching. The instinct of self-assertion is usually well developed in a teacher and the sight of thirty or more attentive faces is singularly gratifying.

Moreover, class-teaching is hardly ever boring, as coaching can be. If one has two pupils, shy or stupid, an hour's private work can be purgatory ; in a class, there is always someone to provide diversion. With single pupils also, the possible variations in method are comparatively few, with a class far more variety is possible. Then, too, with a single pupil the teacher is apt to have long spaces of time on his hands while the child writes or learns by heart. In a class there is always someone needing attention.

Yet, in spite of these great and obvious advantages, class-teaching is made the subject of numerous attacks. These can be roughly grouped into two sets, though the causes of blame are largely common. Some attack class-teaching by contrasting it unfavourably with individual teaching, such as coaching ; others by contrasting it with some of the modern forms of individual work planned to remedy the defects of class-teaching.

The defects of class-teaching are obvious. We supposed, before discussing the advantages of class-teaching that the class was homogeneous. This in practice it hardly ever is. A little variety is perhaps a good thing, but in a large class of forty or more children, this variety is so great that one part or other of the class is almost sure to suffer. Generally both the abnormally clever and the abnormally stupid learn far less than they could under other circumstances. The clever child is made to repeat work with which he is perfectly familiar, the slow child is rushed on from one point to the next without getting a proper grip of any.

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Moreover, there is a certain speed of teaching which is adapted to dealing with some children and not others. This speed of teaching depends on the actual rate of speech and on the explicitness with which all the connections between facts are stated. How much better, say the critics, if the rate of exposition were adapted to each individual child or if the children were set free from oral exposition and left to learn at their own pace from books.

Again it is urged that all the children in a class have different needs and problems. The class teacher will give roughly what the majority need, he will not help the more exceptional who perhaps need help most. Then in so far as the teacher's influence is good, the more the children can be brought under it the better. A large class prevents the teacher from having as much influence on individuals as he would have in dealing personally with one or two people.

Lastly, it is claimed that class-teaching is unnatural. Children were not meant to be herded together, treated as a mass, instructed *en bloc*. The general oral lesson, for the sake of which class-teaching was invented, is a waste of time compared with almost any form of teaching.

Much of the critics' contention is certainly admissible. In effectiveness, on the *intellectual* plane, class-teaching cannot compare with private coaching. Individual tuition may sometimes be dull, both for teachers and pupil, but it will produce results that are impossible from class-teaching. Similarly an adult who has been accustomed to the Oxford system of private coaching, finds the mass teaching in a Scotch university very unsatisfactory. The lectures may be excellent, there may be plenty of class work demanded, but the student misses the stimulus to individual effort that the essay system gives, and he misses most of all the emotional and intellectual effect that is produced by the close association of coach and pupil. This association is fruitful of many things beside learning. The teacher shares

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with the pupil his maturer attitude to life and letters, and in return the teacher enjoys the pleasure of coming into contact with a young and eager mind.

Class-teaching is unnatural. The child wants to be doing, exploring, discovering for himself. Much class-teaching demands that the child shall sit passively receptive. This, very few children want to do, except for a very short space of time. They want to take an active part in things. Moreover, they want to be independent. "Round the garden of knowledge there is a fence and the teacher likes to be the only gap in it." Children want to push their way in themselves, straggle about as they will, and view it from their own angle. They do not like their explorations hampered and their vision restricted by too insistent and ubiquitous guidance.

There probably cannot be for some time much individual teaching in the elementary schools. There will always be an insurmountable barrier—we could not afford it. Further, whatever the intellectual gains may be, it is a highly debatable point whether the loss in the pleasure of society, competition and social life would not more than counter balance the intellectual gains. Besides, though a child *can* learn far more when taught individually, he sometimes *will* not even learn as much as he does in class. He needs the stimulus of others to make him work.

There have therefore been suggestions for some form of individual work, in which the pupil learns with a certain amount of guidance from the teacher. There are many forms of this, each declared by its upholders to be the most perfect, and distinguished from the others rather by machinery, than by fundamental idea. This individual work is at least as old as the dame school in which each child "studied his piece" and, having studied it, came out and said it. Some method very like this is often used in infant schools to-day. The children each work at their own tasks—some reading, others

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writing or doing sums. The apparatus is so arranged that the children can, in many cases, correct their own work. The teacher helps, gives out fresh work, questions the children on what they have been reading, and so on. This type of teaching is eminently satisfactory when well done, but it requires special skill on the part of the teacher, and is far harder to manage successfully than ordinary class-teaching. Closely akin to it in organization is the Montessori type of school where again the children work, in the main individually, at their own tasks and at their own rates, though the content of the instruction is usually rather different from that given in the ordinary elementary schools.

Something of this same simple individual work extends into the upper school. In some cases the higher forms are given periods each week when they work out by themselves the answers to questions with the aid of books provided. In some cases there is more direct continuity with the infant school, and individual work in some form is required throughout the senior school. Sometimes there is a break ; the infant school methods give way to rigid class-teaching in Standard II, and freedom is only recaptured late and with difficulty at the end of the school career.

The reason for this break is probably that the schools are obsessed with the importance of "getting children on" and they do not think individual work will result in as great an effort on the children's part as will class-teaching. Slackers can go undetected, they claim, and children will not devote themselves to their weak subjects. It is to meet such objections that the machinery of the Dalton Plan has been invented.

The Dalton Plan has two main aspects. It provides a guide to which the children may work, and it provides records by which the children's progress may continually be checked.

The guidance is supplied by means of written "assignments". These are pieces of work arranged for the week

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and month. The child is given these, does what he is told, and gets the work corrected, or in certain cases is questioned orally. This is a sample from Miss Helen Parkhurst's assignments. It can be seen that the real vital success of the whole plan depends on the merits of these assignments.

HISTORY ASSIGNMENTS. ASSIGNMENT No. 1¹ (for IV grade pupils, 7, 8, 9 years)

GRADE IV, HISTORY. 5TH CONTRACT ASSIGNMENT.

After Paul Revere had warned the "minute men" that the British were coming, and after the British had been beaten back from Concord, there was no fighting for some months. The British were perfectly satisfied to stay in Boston and not meddle with the "minute men". On June 17th, 1775, the British saw that the "minute men" had put up a fort on Bunker Hill in Charlestown. If the British did not drive the Americans off the hill the Americans might drive the British out of Boston. The British attacked Bunker Hill, and after being driven back twice with great loss of life, they finally succeeded in driving the Americans away because the Americans had used up all their ammunition. In the summer General George Washington came to take command of the American army near Boston and in the spring of the next year by mounting some cannon on Dorchester Heights near Boston, he made the British get into their ships and sail away. Washington then went to New York, and the British came there soon after. This time the British were successful, and Washington was driven out of New York, and across New Jersey with the British in hot pursuit. When Washington crossed the Delaware River into Pennsylvania the British gave up the chase, thinking they had frightened him away for good and all.

¹ Helen Parkhurst, *The Dalton Plan*, 1924, p. 70.

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1ST WEEK

This week we are going to read how Washington surprised the British when they least expected it. There will be two problems to work on.

PROBLEMS

1. Suppose you were one of Washington's soldiers at the time when the British were chasing him across New Jersey and Pennsylvania. Write the story of how you crossed the Delaware River on Christmas night and how you took Trenton.

2. Again, supposing you are one of Washington's men. This time you are with the American Army at Valley Forge during the winter of 1776-7, when the British were snugly housed in Philadelphia and when Washington and his poor little army were shivering at Valley Forge. Write a letter home to your children telling them of your life in camp.

REFERENCE

The reference for these problems is *American Hero Stories*. Use the index to find the stories you want. One is called "A Christmas Surprise" and the other "Winter at Valley Forge".

EQUIVALENTS

Each of these problems counts as two-and-a-half units of work. Bring your compositions to me when you have finished them.

DEPARTMENTAL CUT

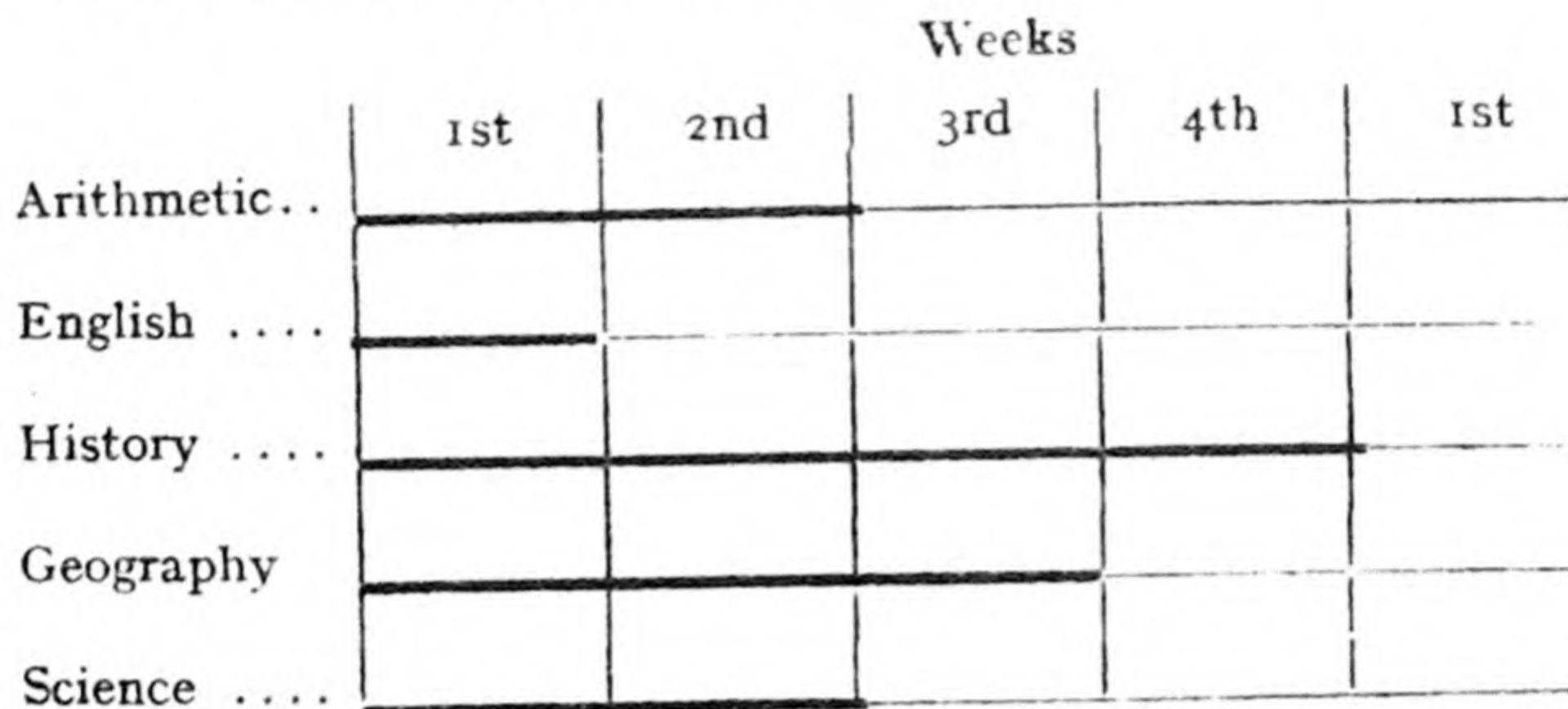
This written work, when accepted by me, may be credited as five units of work in English Composition.¹

The records are kept in various forms. The child has his, the form master his, the head his. Each week's

¹ See also *Dalton Plan Assignments*, vol. i., ii., Staff of the Streatham County Secondary School. G. Bell & Sons.

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work that is completed is marked on a graph. The result is something as follows :



This would mean that the child had completed his whole month's assignment for History, one week's English, and so on. When all the subjects had reached the month line he might begin on the assignments for the next month.

In actual working the school is divided in classes for purposes of registration and social life. After reporting in his class-room the child goes off to one of the subject rooms, where he finds books, maps, pictures and the specialist in charge of the subject. There he works at whatever he chooses to do until he is tired of it, or has completed a piece of work. He is free to ask questions of the teacher, get up and use what books he needs and to leave when he wishes. The morning is generally devoted to this free work. In the afternoon there are lessons in which points of special interest or difficulty are explained. Communal lessons such as choral singing are taken and work which has been prepared for recitation is heard.

This method, it is claimed, meets all the demands and solves all the difficulties. Under it the disadvantages of class-teaching disappear. Children work at their own pace, and progress as fast as they are able without being retarded for the slow members of the class or speeded up for the quick ; and yet there is sufficient class-teaching

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to give opportunities for communal enjoyment. Children are active in their work, instead of passive ; they find out for themselves instead of having information poured over them. They are made responsible for the arrangement of their time and become self-reliant. The freedom of movement removes the irritating and unnatural restraint of ordinary class-teaching, and discipline becomes easier. There is a pleasant co-operation between the staff and the children, the former cease to be task-masters and become helpers, while among the children slackening is abolished.

There is a further advantage. With class-teaching the children's written or preparation work is mainly individualistic because the co-operation of groups of children is difficult. Under the Dalton Plan group work is easy. Children can read passages and ask each other questions, they can co-operate over the making of a map or the elaboration of a report on a subject studied. This communal work is of great importance as a training for future life, since such work is then continually needed, and is not easy to do well without previous experience of the kind that the Dalton Plan provides.

All this may be true if the plan is worked to perfection ; but, in practice, the plan is hard to work. The greatest difficulty seems to lie in the drawing-up of the assignments. With experience, teachers can tell about how much work their children should be able to cover in a week, but it is not easy to arrange that work in assignments which are both attractive and comprehensible. Miss Parkhurst insists on the importance of "interest pockets" by which she means that the assignments should suggest some problem or touch on some topic that is attractive to the child. Moreover, the assignments ought to make clear to the children the *purpose* of the work they are going to do. With unskilful teachers the assignments of work often degenerate into "*Geography. Read pp. 6-9 and copy the map on p. 8.*"

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A further difficulty arises over the supply of text-books. Most class books are either "reading books" or summaries of facts, intended to be made palatable by a running commentary from the teacher. The Dalton Plan with its large amount of reading and book study demands special text-books, and till these are written there must always be trouble in finding suitable reading matter for the children. The ideal book would be simple and interesting to read, be divided up into sections roughly corresponding to a week's work and provided with questions, exercises and summaries. Such books would remove most of the difficulties in drawing up the assignments.

One other method might be mentioned which provides an alternative to class-teaching and the oral lesson. This is the P.N.E.U. system invented by Miss Charlotte Mason. Its main points are that children should be trained to read for themselves from good books of literary value. They should read the required portion *once*, and then narrate it either verbally or in writing. The matter thus read and re-told is learnt and never revised; the child remembers it because he has made an effort of attention, followed by the effort of reproduction and has been forced to *understand* what he is about.

The P.N.E.U. summarizes the points to be noticed as follows :

"A. In devising a syllabus for a normal child of whatever social class, three points must be considered :

- (a) He requires *much* knowledge, for the mind needs sufficient food as much as does the body.
- (b) The knowledge should be various, for sameness in mental diet does not create appetite (i.e. curiosity).
- (c) Knowledge should be communicated in well-chosen language, because his attention responds naturally to what is conveyed in literary form.

"B. As knowledge is not assimilated until it is reproduced, children should "tell back" after a single

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reading or hearing ; or should write some part of what they have read.

"C. *A single reading* is insisted on, because children have natural powers of attention ; but this force is dissipated by the re-reading of passages, and also by questioning, summarizing and the like.

"Acting upon these and some other points in the behaviour of mind, we find that the educability of children is enormously greater than has hitherto been supposed, and is but little dependent on such circumstances as heredity or environment.

"Nor is the accuracy of this statement limited to clever children or to children of the educated classes ; thousands of children in elementary schools respond freely to this method, which is based on the *behaviour of mind*."

This method in practice leads to lessons in which the children read longer or shorter passages, and then tell the teacher what they have read, or write it down. Variations can be introduced by the teacher reading some passages to the class or by one of the children reading. Although the form of the lesson is somewhat monotonous the children appear to enjoy the method and they certainly work extremely hard, putting forth many times as much effort as they do in ordinary oral lessons, and learning a correspondingly greater amount. Great emphasis is laid on the necessity of having text-books of literary value. From these books the children learn the use of words, the turns of good speech, and, incidentally, to spell. A very good oral lesson, which is rare, is superior in some ways to a book, an average or poor one, far inferior.

The difficulty of introducing this method into the elementary schools is the cost of the books, but some counties, e.g. Gloucestershire, have introduced it and claim that it works excellently. The expense is greatly decreased by dividing each class into groups and by buying copies of a book for a group only, instead of for

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the whole class. Thus the groups work at different subjects and then change books. Again, some books are used by several different classes and can be passed from one to the other.

As an example of the books used, the following lists for History are taken from the syllabuses of a few years ago :

FORM I

Our Island Story, H. E. Marshall (Jack).

Story of Lord Roberts (Jack).

Tales from St Paul's, Mrs Frewen Lord (Sampson Low).

Heroes and Heroic Deeds of the Great War, D. A. MacKenzie (Blackie).

FORM II

Black's History Pictures, *Modern England*.

History of England, H. O. Arnold-Forster (Cassell), pp. 807-33.

Social Life Through the Centuries, R. H. W. Wall (Blackie).

Lord Kitchener, D. MacKenzie (Blackie).

In this form there is also General History and Citizenship. In Forms III and IV, there is French and General History and Citizenship.

In V and VI they should do

A Survey of Modern History, H. W. Hodges (Blackie),

The Legacy of Greece and Rome, W. De Burgh (Macdonald),

and use a Literary and Historical Atlas (Dent).

It is anticipated that elementary school children will get as far as Form IV. Therefore their history work will be :

Make a chart of the period studied (1861-1920). Read a daily newspaper and keep a calendar of events.

Lord Kitchener, D. MacKenzie (Blackie).

A Survey of Modern History (Blackie), 1861-1920.

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- History of Everyday Things,* H. and C. Quennell.*
History of England, H. O. Arnold-Forster, pp. 807-33.
British Museum for Children, Frances Epps, p. 9.
Keep a book of Centuries putting in illustrations from all history studied.
The Story of the Great War, D. A. MacKenzie, pp. 1-54.*
First History of France, Creighton (Longmans).

CITIZENSHIP.

- Ourselves, B.I. (Kegan Paul).*
Plutarch's Lives, translated by North. Paulus Aemilius, Ed. by P. Giles (University Press).
*Smaller Classical Dictionary, Smith.**
Citizenship, E. R. Worts (Hodder & Stoughton), pp. 228-77.
Social and Industrial Life, J. St Loe Strachey (Macmillan).

Books marked * for reference.

This is a far wider scheme than that provided by the ordinary teaching of an elementary school and is a better preparation for after life and reading.

The difference is achieved by the practical abolition of the oral lesson, and the substitution of a form of semi-individual work, which throws the effort on the pupil.

Whether either the Dalton Plan with its long hours of silent work, or the P.N.E.U. system with its endless reading and repetition is perfect seems very doubtful. In both cases the rigour of the law might be tempered and a judicious mixture arrived at which allowed a little more individuality and gave less chance for boredom.

The form of organization which meets all the demands best is probably the small class combined with opportunities for frequent promotion. A class of about ten children provides enough variety and stimulus, it allows for a large amount of individual attention, and if there are abundant opportunities for frequent promotion, it can be kept as nearly homogeneous as necessary.

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The sensible teacher will be guided by his experience and by the circumstances in which he finds himself. If education is to be a live growing thing, it cannot be forced into the mould of any mechanical system. The criticisms that have been launched upon oral class-teaching have done good in that they have led to the development of interesting methods by which oral teaching can be supplemented, and with which it can be alternated. It is highly doubtful whether the oral lesson can be done away with altogether. The voice and presence of the teacher—the meeting of teacher and pupil in the learning-teaching experience—seem essential for the best results. Even broadcasting is a poor thin thing compared with hearing and seeing the person at the same time !

Yet before the child leaves school we want him to have the mental equipment and the desire to continue his education for himself when the teacher is no longer at hand to inspire him. He must therefore learn to use books and to like them, and to let them take the place once occupied by his teacher ; for we are not, like the Americans, a lecture-loving people. We either continue our education from books or we do not continue it at all. Wherever the teacher can, from Dalton Plan, P.N.E.U. method, or any other scheme, take a hint for training the child in self-reliance and independent work, let him do it ; but if he is worth his salt, his use of these ideas will show adaptation to the particular personalities and cases in hand.

QUESTIONS FOR DISCUSSION

- 1.—Recall any experiences of your own as a member of a class. showing what you believe you gained from those experiences.
- 2.—What advantages and disadvantages would good class teaching afford to :
 - (a) an only child,
 - (b) a dreamy child from a large family,
 - (c) a child of a strong contra-suggestive type ?
- 3.—Collect examples of Dalton Plan assignments and discuss their merits.

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- 4.—Plan a course of individual work in novel-reading for children in Standards VI and VII.
- 5.—Discuss in detail how you would organize team-work in connection with (a) Handwork in Standard II.
(b) Literature in Standard V.
(c) History in Standard III.
(d) Science in Standards VI and VII.
(e) Arithmetic in Standard I.
- 6.—How would you deal with the child who seems friendless and out of sympathy with the other children in his class? What causes would you expect to find for such a condition?
- 7.—Discuss the nature and uses of cliques in classes.
- 8.—Describe any examples you have seen of grouping within the class for purposes of competition or discipline. What dangers have such groupings?
- 9.—Show how the shape and aspect of the class-room affects the management of the class.

BOOKS

(The books given here marked * are suggested for use in connection with all the following chapters in this section.)

- W. C. BAGLEY, **Educational Values*.
 **Craftsmanship in Teaching*.
- J. J. FINDLAY, **Principles of Class Teaching*.
- HELEN PARKHURST, *Education on the Dalton Plan*.
- J. A. STEVENSON, *Project Method in Teaching*.
- STAFF OF STREATHAM COUNTY SCHOOL, *Dalton Plan Assignments*.
- EVELYN DEWEY, *Dalton Laboratory Plan*.
- G. STANLEY HALL, **Educational Problems*.
- W. H. KILPATRICK, **Foundations of Method*.
- M. W. KEATINGE, **Suggestion in Education*.
- GRANT RICHARDS, *The Woman in the Little House*.

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" You may call it 'nonsense' if you like, but I've heard nonsense, compared with which that would be as sensible as a dictionary."

CLASS-TEACHING is not a natural process and therefore has had to develop a special technique to cope with artificial conditions. If we contrast for a moment the teaching which an intelligent child receives in an educated family, and that which a class of children receives from a skilled teacher, the difference is at once apparent. The single child asks questions dealing with matters of immediate interest. If he is five or six they may well be of this type :—How did you get that telegram ? Why did it not blow off the wires as it came along ? What does it mean that Uncle John is dead ? What happens when you die ? Can I feel my heart beat ? and so on.

The natural answer to these questions produces such expositions of electricity and the circulatory system as the parent or nurse is capable of. At another time the child may demand a story and, having heard the tale of the *Tinder Box* once, may want it repeated or read to him again. He may want to write a letter, or try to read one he has received ; or look at the print from which his mother is reading nursery rhymes, and spell out the capitals for himself. In all these cases information is given in response to a direct demand on the part of the child and is received by him in a normal setting. The child is instrumental in directing his own education. Even when formal lessons are given, when a boy is called in from the garden to do his reading or his sums, the situation is an individual one and the movements

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of the child's mind are followed directly by the teacher.

In dealing with a class, conditions are entirely different. If each child in a class of fifty behaved as if he were being taught individually, the teacher would be quite unable to deal with fifty children's questions asked simultaneously. As a matter of fact, however, school conditions commonly destroy that natural atmosphere which stimulates the child to ask questions. While to the healthy child a day in the country or at home is full of problems, surprises, and discoveries, a day in an average class-room of an ordinary elementary school is too frequently barren of anything that provokes natural and genuine interest. The teacher has by art, therefore, to awaken that natural questioning frame of mind which the unnatural school situation tends to crush.

The problem of class instruction is an old one, and while on the one hand there have been those who attempted to solve the problem by systematic procedure which tended to develop into formalism, there have always been, on the other hand, those who proclaimed "Back to Nature" doctrines. We have had Herbart, and we have had Rousseau and Pestalozzi.

Systems have their day, and few have gone without leaving some idea which has grown into later theory and helped later practice. But the begetter of an idea is seldom able to keep it within bounds, and if he does not develop it and attempt to apply it *ad absurdum* his disciples probably will do so. It is as easy, therefore, to pick holes in the educational doings of our forefathers, as it is to laugh at their millinery and lament their deplorable ignorance of hygiene; but it is also possible to learn from their mistakes and take modern theories calmly.

Among educationists of the last century Herbart was the most influential. His disciples gave especial attention to the form of the class-lesson. They erred on

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the side of rigidity and suggested far too great a uniformity. But some of their ideas are still fruitful ; and although we no longer use their strict form, it is worth while to consider them and learn what they can teach us.

The Herbartian lesson falls into five steps. The first is *Preparation*. This is designed to suggest a suitable problem, and to call up a suitable set of ideas in the children's minds. The "Introduction" to a lesson is, however, older than the Herbartianism of 1890, and funny stories about unsuitable introductions were rife long before Herbart was heard of.

A young teacher introducing a lesson on coffee began by asking the children : " What did you have for breakfast this morning ? " To which the obvious but quite irrelevant answers were given : " Porridge," " Bread," " Jam," " Bacon," etc. " No," said the teacher, " I want to know what you had to drink." Again the answers (this being England and not France) were quite irrelevant : " Tea," " Milk," " Cocoa," etc. The teacher, at last out of patience, bawled at a child who had said " Tea," " No, you didn't—you had *coffee*."

Like their predecessors, devoted Herbartians have lavished ingenuity on the introductions and have been clever enough to be ridiculous.

A teacher with a philosophic width of vision called his class to the windows.

" What do you see outside ? "

They saw everything, trees, houses, shops, cars ; but none of these was the right answer. At last the teacher said :

" What you see, children, is *light*. Now go back to your seats. I am going to give you a lesson on a candle."

The Herbartians called this process preparing " the apperceptive masses".

The step is naturally essential with the present school time tables where teacher and children are half-hourly jumping from one subject to another, from Scripture to

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Arithmetic, Singing to History, and so on. It would obviously be bewildering to follow the concluding bars of "Strawberry Fair" by a statement "from the blue" that "Drake was the first Englishman to sail round the world."

Acting upon the psychological principle that we interpret the new by means of the old, we begin a lesson by calling up such ideas as the children have, which will aid them to comprehend what we are about to present to them. The method employed is usually that of questioning.

In practical teaching this preparation is frequently no more than : "What was I talking about last time ?" or "Who was it discovered America ?" "Columbus." "Yes." "What country did he come from ?" "Spain." "Well, to-day I will tell you what use Spain made of this new country."

At the same time that the teacher is reminding the child of relevant experiences, he is often also suggesting a problem to be solved during the lesson. Thus a teacher might begin a lesson on "Trade and Anti-Trade Winds" by reminding the children of a lesson on Elizabethan sailors, and of how these men regularly set sail in October to catch winds that would take them to the Spanish Main. The teacher might refer also to the Wind-Weather Chart that the children have kept, and so lead up quickly to the problem, "Why is it that the S.W. wind is the prevalent one in our country, and that the trade winds blow in the tropics ?"

This stimulation of curiosity is an attempt to reproduce in the class-room the child's natural tendency to ask questions.

The next Herbartian step is the *Presentation*. This is the actual matter of the lesson and is generally the essential part for the sake of which the lesson is given.

In an oral lesson, the method generally employed is exposition assisted by questions and illustrations.

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Exposition is the setting out of matter, generally new matter, in a clear and comprehensible form. As such it must form a very large part of our teaching, and, like all things in education, it differs greatly in different cases. Exposition is not the same when a historian is setting out an account of the Peloponnesian war, when a professor of Greek is giving a commentary on the text of the Agamemnon, or when an engineer is expounding a theorem relating to the viscosity of steam. In some cases there is a narrative to be told and the arrangement is temporal, in others the connection of the facts is logical and in no degree temporal, in another case it may be almost spatial, as in Geography or those lessons when we "now go on to the next paragraph". Anything that is said here, therefore, must be understood to be subject to exception and variation.

The essence of exposition is that it must be clear. Various elements combine to assist clarity.

(a) The matter to be expounded must be itself a unity. The lesson, in short, must have an "aim", and this "aim" should sum up what it is proposed to teach. In one part of the country the course on hygiene invariably includes a lesson on alcohol. The student taking the lesson puts down in her notes, "To teach the children about alcohol." If she is a good teacher the lesson assumes a certain coherence, if she is a bad one, after an inaccurate talk about "Drinks and their uses", we arrive at an experiment to show that alcohol hardens living tissues, and end with the assertion, repeated with some surprise, from an unexplained source, that many people use alcohol for lubricating their motor cars!

The failure of this latter lesson was due almost entirely to the indefiniteness of the aim. "Alcohol" in general is no subject for a single lesson—even to Standard VI. One could confine the lesson to the one property of hardening tissues and show the advantages or dangers of this for man. One could explain its low freezing point and discuss its use in thermometers and in the

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radiators of motors. One could show its uses as an antiseptic or as an intoxicant or as a food. A lesson to be good must be on some definite point sufficiently circumscribed to be dealt with in a single lesson and allowing the teacher to arrange his matter so as to leave a single clear impression on the minds of the class.

The aim of the lesson should be clear to the children and remain in their minds during the whole lesson. It enormously aids one's power of following an exposition if one knows to what end it is tending. For many centuries Euclid's Geometry was accepted as the ideal form of exposition and it still remains unrivalled in its own sphere. There we have a series of propositions, each a piece, one might say, the size for a single lesson, connected together to form a continuous series. Each proposition is an argument directed to proving a single point and the nature of this point is made quite clear from the beginning. We are "to prove" something or other. We know where we are, and what lies before us. Activity is most effective and pleasant when it is purposive. Many lessons otherwise good, are spoilt by unnecessary mystification on the part of the teacher. Even when reading poetry to the class it is an advantage if the teacher says in advance what particular features of the poem she wishes to be observed. Then, in addition to the general impression left by the poem, certain facts stand out, and are apprehended much more directly than if the poem were read without introduction and the special points raised only at the end.

(b) Within the piece chosen there are naturally subdivisions. In writing we mark them by paragraphs. The practised orator indicates them by some rhetorical device: he pauses, recapitulates, bangs on the table. The skilful teacher also indicates his paragraphs. In a narrative lesson there can be a pause, a question, "And what do you think King Henry would do next?" or a brief summary. Very often we state the aim of the next section. "Now we will go on to the *schools* of that

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time." In Geography the children can fill in the places already mentioned on their maps; in Arithmetic they can work one or two examples to show whether they have understood the points made so far.

This paragraphing has a psychological importance beyond its logical aim. The human mind only works at a certain pace, and some people think more slowly than others. The time used in recapitulating or entering names allows what has already been said to be better apprehended, and enables the slower thinkers to adjust themselves for new matter. The pauses serve the same purpose as the waits between the courses at a long dinner!

(c) Wherever possible, the connection between the paragraphs should be emphasized. Just as each lesson should be connected with the preceding and succeeding members of the series, and this connection made as clear as possible, so, within the lesson, frequent reference backwards and forwards among the parts aids clarity and recollection.

(d) With regard to the order of the paragraphs, common sense and convenience must take precedence over theory. We cannot assert in general terms that we proceed from the simple to the complex, the concrete to the abstract, or *vice versa*. Knowledge starts from things as they are, not as they appear when dissected by logic. A small boy understands the running and repair of a motor car, having learnt this from experiment and observation of the complex concrete object. In Hand-work and Needlework lessons, it is generally advisable to begin by showing the class a finished specimen of the thing they are to make. By analysing this complex thing they arrive at the simple units of knowledge by the light of which they make their own specimens. In teaching the meaning of an ordnance-survey map, a teacher might well begin with the complex thing and resolve it into simpler units. In Nature Study lessons the same order might be observed. In other lessons,

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e.g. a rule in Arithmetic, the usual order is from the simple to the complex. In talks on morals we may begin with the abstract idea and proceed to apply it to concrete instances, thereby testing and clarifying it. In countless other lessons, such as those on areas or local government, we usually proceed from the familiar concrete to the theoretic abstract.

(e) In deciding the size of the piece expounded we encounter many difficulties due to the widely varying mentality of the children in a class. Not only are some children more intelligent than others, but each child learns in a different way from his neighbour. One learns best if he is told many things in quick sequence, and then is given a long period for revision and re-arrangement, another likes his information in small, regular doses. One likes to discuss with the teacher at every point ; another is annoyed by these interruptions. So the question of the amount of material for a lesson passes into the wider one of the *rate* of exposition. A clever child taught alone can learn at an amazing rate.

A very clever child beginning Greek used to read through the declension of, say, *κριτης* and then was quite able to do the exercise on it without a mistake. This occupied about fifteen minutes. The next day he read *λογος* in a similar way and did the exercise on that. There was never the least need for revision. A stupid child doing the same work would take a term to master the matter that this child learned in a week. And when a class is composed of children of very different abilities the difficulty becomes acute.

The rate of exposition also depends very largely on the teacher's natural rate of speech. This can vary within very wide limits, without being too fast or too slow. If he has a clear enunciation, a happy trick of putting things plainly, and especially of winning the whole attention of the children, he can proceed much faster than his fellow teacher, slower or less distinct of speech.

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In brief, a sensible and observant teacher soon realizes the capabilities of himself and of his class. He foresees how much time will be spent in discussion, revision, practical work, or in disciplinary interruptions, and gauges the amount of his material and arranges the rate of his exposition accordingly.

In the experience of the writers, and of many of their friends who have observed lessons given by students or young teachers, there have been many more lessons that have erred on the side of thinness, and have become merely pleasant but quite futile "chat", than lessons that have failed because they were too full.

When the whole class is backward, the rate of exposition is slow. There is then abundant repetition and the ingenuity of the teacher is taxed in finding ever new ways of presenting the same information. Actual repetition will produce a parrot memory; to make memory really intelligent the new material must be worked up into fresh combinations and seen from different angles. The uninventive teacher having told the life history of the silk-worm calls out some half dozen children in turn who all repeat the same information in a form which grows more stereotyped and meagre at each repetition. He prays for the bell to ring so that he can be free of an occupation that he feels useless. The need is for a varied process. The children might draw, compare the life of the silk-worm with that of other insects, and discuss the difficulties in keeping silk-worms, the food to be given them and the products to be expected. The repetition is there just as truly, but it is in a form that widens rather than restricts knowledge.

This process might be considered as part of the third step of the Herbartians, that of *Association*. This stage is Herbart's most real contribution to educational theory. He pointed out that facts are only learnt in their connections. A new disconnected fact is gone almost as soon as learnt. To assure retention a fact must be associated with others so as to form part of a

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system. At this stage of the lesson the teacher shows the connection between the new facts presented and the old, and helps the children to build up old and new into a new and more complete unity.

Herbart may be right in his insistence on the necessity of association, but he is probably wrong in making it a separate stage in a lesson. To take an example : we do not learn about Drake's voyage round the world and *then* connect it with the whole previous history of Spanish America. The two processes should go on together. "Association" begins in the "Preparation" stage which stresses the facts which are necessary for understanding Drake's voyage—the political situation, the geography, the conditions of the Spanish occupation—further "association" is an integral part of the presentation. Drake followed in Magellan's footsteps, and the camp where he executed Doughty was near the gallows on which the skeleton of one of the earlier explorer's men still rattled in its chains ; the penguins on the islands in the Strait justify a reference forward to those which fascinated Scott and Shackleton. Lima and Callao must be placed on the map. The friendly King of California in his robe of coney skins suggests a contrast with the tribes of Hiawatha and a comparison, if teacher or class know anything about them, with the Pueblo Indians of the south. So on to Java and the Cape of Good Hope, then newly discovered, and home with a freight whose wealth was never known ; and the lesson closes with a reference forward to the Armada and the freeing of the Netherlands. To attempt to make all these associations at the *end* of the exposition is to involve a weary repetition of much of the lesson and to destroy the interest of each piece as it is told.

The step of *Formulation* is the fourth on the list. In this step the whole lesson is drawn together—a summary is made, a general rule formulated, or some form of revision is conducted. It is obvious that the children should take the chief part at this stage of the lesson, and

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that frequently they will do something to make the rule, or summary, permanent in their minds. They write in their notebooks, or learn by heart, or apply what they have learnt to new, or different situations.

Hence naturally follows the last Herbartian step—that of *Application*.

Again Herbart is right, though his statement of the idea is unnecessarily pedantic and so has led to countless follies. The use of knowledge is the surest way of impressing it and making it permanent. To learn a thing and have that skill idle is to lose it almost at once. Therefore we should naturally expect children to apply what we teach them. The difficulty, like so many others, comes through our own educational system. We teach children things for which they have no real use—not even an artificial educational use.

A London child of five was discussing education. He could not yet quite read, he might easily make mistakes in his counting, he was full of wonder at the world.

"What do you learn at school?" he was asked.

"Lots of things."

"Tell me one."

"About coal-mines."

"Do you know much about them?"

"No, really not *very* much. My teacher doesn't either, but she does her best. You see we have to learn coal-mines because the school says so!"

To how many lessons of the mediocre kind (a good teacher can get good out of anything) could this apply—lessons on The Battles of the Hundred Years War, The Wars of the Roses, fourth-rate verse, and the Ten Plagues of Egypt.

In consequence much ingenuity has been expended on devising applications that will drive home these naturally indigestible lessons. There are "essays" when a child cannot yet even speak two sentences grammatically. There are the inept half-hearted charades that are called "dramatizing", and there is

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clay-modelling. That is the dearest resource of the uninventive teacher. How much it manages to "apply" the lesson can be judged from the case of a teacher of seven-year-olds who, having given a scripture lesson on the Expulsion from Eden, set her class to model fig leaves, offering those who could not imagine them the option of representing God Almighty instead!

Few teachers now attempt to arrange their lessons in the five compartments of the Herbartian pigeon-holes, although it is often helpful and suggestive to bear them in mind. There are two definite types of lessons to which the Herbartian plan cannot be applied, those lessons of which the aim is increased skill, as writing, music, and drawing lessons, and those lessons of which the aim is appreciation, such as literature.

For most of us it is sufficient to realize that like other works of art, oral lessons have a beginning, a middle and an end. A very few have only a middle, some only an end, and a few stop at the beginning. But exceptions aside, most oral lessons begin with a short introduction and a statement of the aim of the lesson, proceed to the exposition of certain matter, and conclude with some application or summing up. For example, in a History lesson, one may remind the class of the state of France under the old régime, tell the class about the outbreak of the revolution and the fall of the Bastille and end by a blackboard summary or ask them to write an account of the chief events. In Arithmetic one corrects a sum from last lesson, works a new type of sum on the board and then allows the class to do similar examples.

Naturally in Composition lessons when the children just write, or in reading lessons when they do "silent reading", there are not these parts, and to attempt to divide up such a lesson would be folly.

For Herbart the writing up of notes of lessons was a mystery. It ought to be a commonsense indication of what is actually going to happen. The aim of lesson

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notes is twofold ; to help the teacher, and to enable anyone entering the room to see at once what is happening. Most people find that written notes enable them to arrange their lesson better than they could do otherwise. The written word shows up inconsistencies and awkward pauses, clumsy transitions and ill-arranged questions. The notebook should also be useful to the teacher himself for reference, although no good teacher ever gives a lesson again exactly as he himself gave it the first time.

What is actually written down will depend on the subject and on the individual taste of the teacher. In some lessons it is the method and management that are really important. This is generally the case in teaching small children. The matter is well known to the teacher ; it is the method that puzzles him. In other subjects, as, for example, a poetry lesson, the important thing may be the questions asked and their sequence. In that case these are what require special preparation and should be written beforehand in the notes.

In an informative lesson some people like to write out a summary of the matter, others merely to indicate the main paragraphs into which it falls. For the fluent the latter is probably the best course, for the nervous and tongue-tied the former. It is impossible to draw up any hard and fast rule for the perfect notes, they must be dictated by particular circumstances and personal needs.

A word may be added about the written *aim* of the lesson. A teacher generally has a more remote and fuller aim than that which covers the one lesson. "To train the children's imagination", "To inculcate a love of poetry", "To produce good speech", are not infrequently written at the head of History, Poetry or Reading lessons. This is folly. However worthy such aims may be (and some are psychologically questionable), they are so wide as to be useless. Of course the teacher who takes a poem with a class wants to inculcate a love of poetry. Why else should he take it at all ? Let the teacher with all his ideals keep his feet on the floor and

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his head in the region of common sense. If he "Helps the children to share Wordsworth's thoughts and feelings about Westminster Bridge", "Trains a sense of rhythm", "Helps the children to overcome their bad pronunciation of the 'ai' sound in 'lady,'" etc., he will have quite enough on his programme for one occasion, and will reap the additional advantage of having stated his ideas in a comprehensible form.

QUESTIONS FOR DISCUSSIONS

CONSIDER these notes of lessons and write criticisms of them, touching on their method of arrangement, the subject matter and the English style.

NOTES OF LESSONS

I

PRACTICAL HELP FOR INFANTS' TEACHERS (J. E. Singleton, 1884)

LESSON : AN ORANGE

Selected Matter.—For the youngest infants this is very meagre and elementary.

Fruit of a cultivated plant. Grows in hot countries. Round. Covered with thick rind containing oil-cysts. Juice in cells, sweet and acid. Green when unripe, yellow when ripe. Seeds contained within the pulp.

Divisional Arrangement

Shape: Round. *Size*: Different sizes of different varieties and of the same variety during different stages of growth. *Colour*: Yellow when ripe, green when unripe. *Rind*: Thick, yellow and glossy without, white and dull within. *Juice*: Agreeable taste, contained in cells, both together forming pulp. *Divisions*: Each covered with a separate skin, filled with pulp, seeds within.

Completed "Notes of Lesson"

Introduction.—Show samples of the fruit and ask its name.

Shape: Rolling of orange on the ground by a child. Rolling of irregular piece of wood. Reason why this orange rolls swifter, straighter and farther than the wood. *Round*: Names of things that are round. *Size*: Comparison of two different sized oranges. Infer that these are different sizes. Explanation that size depends on variety and age.

Colour: Comparison of orange with ball of the same size, but of different colour. Name of the colour. Oranges of different shades of yellow. Explanation that they are green when growing and unripe.

Rind: Portion of rind removed. Its name, "Skin", compared to "skin" of the body as being outside. Other names.

FORM OF LESSON

Comparison of outside and inside of the rind; difference in colour and gloss. Comparison of rind with that of an apple. Infer "thickness". Explanation that thick rind is to protect the juice against heat. Experiment showing peel to contain moisture. Explanation that it is a kind of oil suitable for preserving the softness of the skin.

Juice: Experiment of piercing the orange and causing the liquid to flow by squeezing between the hands. Name of the liquid. Explanation that juice is contained in small cells.
Pulp: The cells and juice together. Pulp the part eaten, agreeable to the taste.

Divisions: Division of an orange into parts without loss of juice. Explanation that each part is covered with a thin skin. Elicit each skin to be filled with pulp. A division opened and pips shown within. Explanation that they are seeds of the orange tree.

II

MOFFATT'S HOW TO PREPARE NOTES OF LESSONS (By J. T. Livesey. 5th Edition, 1890)

Notes of a Reading Lesson

The Skylark. (James Hogg)

Bird of the wilderness
Blithesome and cumberless,
Sweet is thy matin o'er moorland and lea !
Emblem of happiness,
Blessed is thy dwelling place,
Oh, to abide in the desert with thee.

(3 more verses)
Poetry. (Highest class.)

Object of Lesson

- (1) To excite children's interest and sympathy in the subject of the poem.
- (2) To enable them to understand the text and realize its force.
- (3) To teach them to read the poem with intelligence and expression.

Scheme or Method of Lesson

- (1) Teacher points out the substance and force of first verse.
- (2) Teacher reads it, and elicits or explains meanings of difficult words, passages and allusions, using blackboard freely. (See below.)
- (3) Teacher reads the verse line by line, as a model, calling attention to the pauses, emphasis and inflections.
- (4) Children read each line after teacher, simultaneously, imitating his pauses, emphasis, and inflections.
- (5) Teacher calls upon one or two children to read the verse individually.
(Other verses are treated similarly.)
- (6) At the end of lesson teacher questions on subject-matter and text.

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Points	Explanation	Blackboard
Introduction	<p>Tell children that the poem they are going to read was written by James Hogg, the "Ettrick Shepherd" (1770-1835).</p>	<p>James Hogg (1770-1835) "Ettrick Shepherd."</p>
1st verse	<p>Tell how he used to mind sheep ; and picture him in the midst of his flock, his grey plaid wrapped round him, lying on a hill-side in Ettrick Dale, listening to the sweet song of the skylark as he watches it soar into the sky. His thoughts are expressed in the poem.</p>	
Wilderness	<p>Tell children, that in the first verse <i>the poet calls down blessings on the skylark, and expresses a wish to share in its happiness.</i></p>	
Blithe	<p>Draw children's attention to the first part of the word <i>wild-erness</i>, and elicit or tell them that wilderness is a <i>wild</i>, lonely, uncultivated place, a bleak mountain side, sometimes called a "wild". Recall Wordsworth's <i>Lucy Gray</i> :</p>	<p>wilderness = wild, lonely place.</p>
	<p>" Oft have I heard of Lucy Gray And when I crossed the <i>wild</i> I chanced to see at break of day The solitary child."</p>	
Cumberless	<p>(a) Try to elicit meaning of "blithe" as in :</p>	
	<p>" Let us all be <i>blithe</i> and gay, It is our summer holiday."</p>	
	<p>(b) Elicit force of "some" in tire-some, trouble-some, then in blithesome.</p>	
	<p>(a) Ask children if they have heard the word "cumbrous" or "cumbersome" or "encumbered".</p>	
	<p>(b) Elicit or tell that "cumber" is a weight or load, as of care. Quote Longfellow's <i>Bridge</i> :</p>	
	<p>" And I think how many thousands Of care-<i>encumbered</i> men, Each bearing his burden of sorrow, Have crossed the bridge since then."</p>	

FORM OF LESSON

<i>Points</i>	<i>Explanation</i>	<i>Blackboard</i>
	(c) Elicit force of "less", as in sense-less, head-less, etc., then meaning of cumberless = without care.	less = without. cumberless = free from care.
Matin	Allude to hymns sung by monks in the early morning—matins. And elicit why the lark's song is so called.	matin = m o r n i n g song.
Moorland	Elicit or tell that moorland is a barren heathy waste, generally in a hilly district, i.e. Ex-moor, Dartmoor. The "Scotch moors"	Moorland = barren waste.
Lea	Show connection with "lay", literally, <i>laid</i> out in grass; grass-land. Quote Gray: "The lowing herd winds slowly o'er the lea."	lie, lay, ley, lea (grass-land).
Emblem	Tell children how qualities and virtues, as strength, purity, innocence, are sometimes represented in pictures by animals which possess these qualities in a marked degree, i.e. a lion represents strength; a dove, purity; a lamb, innocence; and they are called emblems. Then elicit why the poet calls the lark "emblem of happiness".	emblem = sign.
Desert	Elicit, that this means simply a lonely place, a deserted region—not an expanse of sand like the Sahara. (So for other verses.) N.B.—This should be divided into two lessons.	desert = lonely place.

III

NOTES OF LESSONS ON THE HERBARTIAN METHOD (Longmans, 1902)

(M. Fennell and Members of a Teaching Staff)
PHYSICAL GEOGRAPHY LESSON ON THE SCULPTURE OF THE LAND
 Class : Oxford Seniors.
 Time : Three-quarters of an hour.
 Aim : To exercise the understanding of the pupils and lead them to apply their previous knowledge of physiography to explain the present formation of the land.

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MATTER

1. Preparation.

Consider the earth as a divine masterpiece. God the Divine Sculptor. Nature, His hand.

Instruments used.

1. Original cooling of the earth's surface.
2. The atmosphere.
3. Rivers and glaciers.
4. Frost in avalanches.
5. The sea.
6. Upheavals and earthquakes.
7. Volcanoes.

2. Presentation.

The work of each of the above tools :

- (a) Subsidence of some parts (oceans), and consequent relief of others (continents) from the strain of contracting.
- (b) Chief mountain ridges then formed in direction of axis.
- (c) No part of present land is part of original solid surface, though possibly on the same sites. Why ?

1. Cooling process.

The dissolving or wearing work of gases, vapours, winds, evaporation and condensation the cause of (c).

- (a) Wearing away mountains.
- (b) Forming ridges out of tablelands.
- (c) Cutting valleys and canyons.
- (d) Depositing débris partly on plains and chiefly in the sea. In general, levelling the high lands to the sea.

2. Atmosphere.

Filling crevices and joints of rocks, loosing pieces thus forming avalanches, which wear away cliffs and preserve the sharpness of mountain peaks.

3. Rivers and glaciers.

Continually denuding the coastland.

Result of 3, 4 and 5. Laying low of the land and formation of stratified rocks of consolidated débris in the bed of the sea. Only at considerable depth is the earth's surface preserved from decay.

Action of the above counter balanced by :

6. Upheavals.

- (a) Gentle and uniform. Large tracts of sea-floor raised to its original level condition, seen by the horizontal position of the stratified rocks, e.g. 1,000 miles of Central and North Russia and China.

FORM OF LESSON

- | | |
|------------------------------|---|
| (b) Disturbed
and sudden. | By volcanic action : when
the stratified rocks present
a crumpled appearance as
if tilted up ; the oldest
rock highest. Age of
mountain can be told by
the number of upheavals
apparent. |
| (c) Volcanoes. | Form mountain peaks with
lava. |

3. Association.

Comparisons and examples throughout :

For 1. Compare cooling of roast apple.

For 2. The work done by a cyclone on land or by a strong wind dashing sea on land.

For 3. Glaciers of the Alps. Deltas of Mississippi and N.E. canyons of Colorado.

For 4. Landslips after severe frosts. Peaks of the Alps called "Needles".

For 5. West of England and Scotland indented and rugged.

For 6. (a) North of Russia and Siberia.

(b) Andes and Rockies. Alps, etc.

(c) Teneriffe, Vesuvius (Herculaneum, Pompeii).

4. Recapitulation.

Question on the agents at work and the work done by each.

5. Application.

Moral lesson. Some such as the following :

(1) The slowness and continuity of God's work.

(2) All things work together towards His end.

PROCEDURE

Introduce lesson by comparing the formation of the land to the work of a sculptor. Briefly draw from the class the points of resemblance. By referring to the earth as a planet and comparing with Jupiter, elicit what was its original condition. Let us now consider the influences at work upon it which have in course of ages reduced it to its present condition. What took place gradually on the gaseous globe ? Ask what effect this cooling process had on the globe when it solidified. Refer to the familiar example of a roast apple cooling, to elicit the subsidence of some parts and relief of others ; deduce from this the cause of unevenness of earth's surface, and how oceans and continents were formed. From map of world show that the greatest mountain ranges are from North to South, owing to the great lateral pressure caused by the subsidence of land forming the oceans. Show diagram of section of a mountain range with evidence of successive upheavals, and let class deduce from this that possibly the position of them has remained the same throughout all these ages. From the well-known destructive

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work of rain, rivers, etc., draw from pupils that though the *sites* may be the same, the actual substance must have been worn away many times and built up again. This leads us to consider the chief instruments Nature uses to wear away the land. Let class name some, e.g. 2, 3, 4, 5.

For Example 2 refer to the destructive power of winds, e.g. cyclones in tropics; also air loosening rocks by expansion in their crevices. Then go on to the results of evaporation and condensation, and elicit the work of rivers and glaciers. Give examples of glaciers grinding down valleys and carrying débris to the sea. What rivers do to the land below the snow-line, glaciers do above it. From examples of deltas of N.E. Ganges, and Mississippi, draw from class the work of rivers; describe the canyons of Colorado.

Compare the action of rain in the gutter to shallow rivers; cuts up plains, and tablelands, even when compounded of hard rock. Next, pass to the action of frost, and elicit landslips and avalanches. Ask how they are caused. Lastly, ask how the sea helps in the work of denudation of land, and elicit instances of its work, e.g. Zuyder Zee, "The Needles", west coast of British Isles, etc. Collect together the work of (1) The atmosphere, (2) Rivers and glaciers, (3) Frost, (4) The sea, and ask class what is common to it all, and what must be the eventual result if there were not some counter action.

Show illustrations of 6 (a) and (b). Questions as to their manner of formation, and deduce the two kinds of upheavals. What facts can be deduced from the structure of our coal fields? Point out that these stratified rocks were formed in the ocean beds which must have risen gradually—judging by the horizontal positions of the layers—the newest on top. Contrast illustrations of sudden upheavals as to position of oldest rocks. Finally refer to volcanoes and earthquakes, and show how they influence the earth's crust, even in the ocean beds.

Conclude lesson with a short summary, dividing the instruments of Nature into two classes: those which level and those which raise the earth's surface and recapitulate.

Give some examples of how the change of temperature is instrumental in sculpturing the land. Trace the work of rain falling on a tableland. How does it resemble the action of snow above the snow-line? What reason is there for supposing the principal mountain ranges of the continents to be on the *sites* of the original contractions of the earth's crust?

IV. FROM A STUDENT'S NOTEBOOK, 1927 Reading. Standard VI

Death of Arthur

Passages to be read aloud by teacher and best readers. Then to be compared with Tennyson's *Morte d'Arthur*, and discussed.

BOOK
JOHN ADAMS, *Herbartian Psychology*.

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*"Every Jack must study the knack
If he wants to make sure of his Jill."*

WITHIN the frame of the oral lesson there are two devices which may be specially mentioned—Illustration and Questioning. Both present certain difficulties and allow of art in their management.

The purpose of an illustration is to shed light on the matter in hand. In school, therefore, illustrations may be of many kinds: not only pictures, but models, specimens, diagrams, maps, fairy stories and music may be brought under this heading. Each type of illustration has its own particular uses and dangers, but there are certain general principles which concern all types equally.

(a) The illustrations should be interesting.

Many a point or general statement which has seemed hopelessly dull or distant or difficult has developed meaning when interestingly illustrated. A lesson to twelve-year-olds on the Land Forms of Asia leapt to life when photographs of the Everest Expedition were produced. A class showed nothing but continued apathy when a single bedraggled buttercup was produced to illustrate a Nature Study lesson on that flower.

Interest is essential in helping memory. In after years one frequently recalls facts or general statements through the illustrations which accompanied them. And further, one recalls them with *pleasure*, no mean accompaniment to school subjects!

To select our illustrations wisely we must bear in mind a child's likes and impulses. Here as elsewhere it is true that for children the concrete is, as a rule, more interesting than the abstract; that elemental qualities such as bright colour, simple design, possibility of or suggestion of activity make a direct appeal; and (this is a

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practical point of great importance) that if the child's interest is repeatedly thwarted by his not being able to see the model, or by his not having time to satisfy his curiosity about it, he will be increasingly chary of becoming interested on future occasions.

(b) The illustration should be simpler and more comprehensible than the point illustrated. It should, that is, have direct and obvious connections with ideas already present in the children's minds, and should never need elucidation and explanation on its own account. It should strike home without comment. The teacher who illustrates the exports of Canada to ten-year-olds, by a complicated graph, has to give most of the lesson to explaining his illustrations: a child of nine was so puzzled by the diagram of the earth's orbit round the sun, which was supposed to "illustrate" a lesson on the seasons, that to this day she is irritated at the sight of the diagram.

(c) The illustration should be subordinate to the subject it illustrates. This advice is the necessary corrective of advice given in (a). We do not want the illustration to be remembered *to the exclusion* of the points illustrated. We want both to be so intermingled that they live together in the mind. It is often very difficult, however, to secure this subordination. The very nature of the illustration makes it more comprehensible and attractive than the general statement. In nothing does the skilful speaker or writer show his talent to better advantage than in ordering general statements and illustrations in such a way that, although the illustrations arrest attention and illuminate the subject, they are inseparably bound up with the points they illustrate. Similar skill is required daily by the teacher. But unless the teacher is constantly on his guard he will be led into irretraceable digression or futile disconnectedness.

In a lesson to seven-year-olds a teacher, after much talk about the beauties of Japan, produced a Japanese doll. The toy claimed the whole attention of the class

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for the rest of the lesson, and the general topic of Japan faded into the background. In a similar way, an older child may become fascinated by the examples in a grammar book to the exclusion of the rules to which these examples are attached. There was one French grammar that had particularly romantic sentences to illustrate its rules. For example, a gentleman asserts "Let me die, let my name be dishonoured, so that France be saved." Who the hero was the student did not know but his noble sentiment supplied matter for day dreams through many lessons. The "grammar" has all vanished, even the French words in which this sentence was written are forgotten, and the sentiment and the emotional experience aroused are the only relics of the instruction.

This superior attractiveness of the illustration needs be guarded against only in so far as it diverts attention from the main point. In itself there may be no harm in the pleasure that the illustrations give. If through the medium of a French grammar one has encountered a noble thought so much is gained ; if in addition one has learnt a rule about the subjunctive, that is a further gain. The interest in the subjunctive and in the sentiment are not inimical ; they should be supplementary.

Interesting illustrations and examples should be used ; but the good teacher will see that by using many illustrations, by carefully connecting all of them with the point they are to elucidate, and especially by making the children supply other examples, illustrations of the point in hand are subordinated to the point itself.

(d) The illustration must be relevant.

If the illustration is not apt, either the illustrandum or the illustration is likely to be forgotten. The mind loses one of them because it finds them mutually incongruous.

Professor John Adams gives a very good example of the irrelevant in illustration. It is from a moral work

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and was intended to illustrate *living faith*. It ran as follows :

"At the battle of Waterloo, Nathan Meyer Rothschild was in a shot-proof tent, with a swift horse saddled and bridled by his side. At sunset he peered over the battlefield, and saw our soldiers sweeping the French before them. 'Hurrah!' he cried, 'the house of Rothschild has won Waterloo.' (His house had lent the money for the campaign.) He sprang into the saddle, galloped all night, reached the shore at daybreak, bribed a fisherman to take him across the stormy sea, and by whipping and spurring reached London thirty-six hours before anyone else. He used these hours in buying up all the stocks he could, and so gained nearly two millions of pounds. Many on the battlefield beside him had perfect faith in the imminent victory, but their faith was a thin, lazy thing, and did not rouse them to act at once. And so a faith that does not master and move you cannot make you rich in the goods of the soul. Real Christianity is a real living faith in a real living Saviour ; it is a whole faith in a whole Saviour."¹

This story is not only grotesquely irrelevant, it is also extremely provoking in its implications. What business had Nathan Meyer Rothschild in a "shot-proof tent" when other people were winning Waterloo in the charge ? What would Wellington have said if every soldier who knew the battle was won had bolted to London to buy and sell stocks and shares ? It would have been possible doubtless to have found an incident in the able financier's life when he showed faith, perhaps when he put up the money for Waterloo, but the present story is a glorification of sharp dealing and is not pleasant to contemplate. The difference which is made by the aptness or inaptness of a story can be judged from the fact that the writers of this book remembered the story, and the point of Professor Adam's that it illustrated for several years,

¹ *Exposition and Illustration in Teaching*, Macmillan, 1910, p. 263.

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but had completely forgotten to what moral virtue it was *supposed* to refer.

Too great an affection for one's carefully collected illustrative material may lead one into irrelevancies. A teacher of scripture was the proud possessor of models of the Seven-Branched Candlestick, and of Solomon's Temple. Her continual ingenious use of these models became the joke of the school. They were dragged in to illustrate every point from Genesis to Revelation, and, as far as the school could see, the teacher herself really believed they were apt.

Also, a young teacher, or a student on School Practice is tempted to use *ad nauseam*, in and out of season, any one illustration or type of illustration that she has found successful on one occasion. A dressed doll was found to interest the children in a Geography lesson, and hence dressed dolls appeared in History, Drawing, Scripture, Handwork, and Needlework lessons, in places both fit and unfit.

(e) The illustration should, as far as it goes, be exact. A gross improbability will distract attention from the main point.¹ Professor Adams has another excellent example.²

"A few years ago, the owner of a large drug-store advertised for a boy. The next day the store was thronged with boys applying for the place. Among them was a queer looking little fellow, accompanied by his aunt. 'Can't take him,' said the gentleman, 'he's too small.'

"'I know he's small,' said the aunt, 'but he's prompt and faithful.'

"After some consultation the boy was set to work. Not long after a call was made on the boys for someone to stay in the store all night. The other boys seemed reluctant to offer their services. But this boy promptly said, 'I'll stay, sir.'

¹ An example of an inaccurate model is given later in this chapter.

² *Op. cit.*, p. 252.

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"In the middle of the night the merchant went into the store to see that all was right, and found the boy busy at work cutting labels. 'What are you doing, my boy?' he said, 'I did not tell you to work all night.'

"'I know you didn't, sir, but I thought I might as well be doing something.'

"The next day the cashier was told to 'double that boy's wages, for he is prompt and industrious.'

"Not many weeks after this, a show of wild beasts was passing through the streets, and naturally enough all the hands in the store rushed out to see them. A thief saw his opportunity and entered by the back door to steal something. But this prompt boy had stayed behind. He seized the thief, and after a short struggle captured him. Not only was a robbery prevented, but valuable articles stolen from other stores were recovered.

"'Why did you stay behind,' asked the merchant of the boy, 'when all the others went out to see the show?'

"'Because, sir, you told me never to leave the store when the others were absent; so I thought I'd stay.'

"Orders were given once more: 'Double that boy's wages, for he is not only prompt and industrious, but faithful.' That boy is now getting a salary of twenty-five hundred dollars a year, and before long he will become a member of the firm. He was following Elijah's model of promptness, and it helped to make his fortune."

Any thinking child hearing this story can do one of two things: dismiss it entirely from his mind as nonsense, or proceed to analyse it into its constituent absurdities. In neither case will it be the least use from the author's point of view. The perfunctory reference to Elijah will certainly be forgotten instantly; and, the conditions of business failing to conform to fiction, there is not much likelihood that conduct

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will remain on the story level. We need at least one doubling of our salary to keep us as virtuous as that boy.

These general principles apply to any type of illustration, and in addition each particular kind has its own problems, both of selection and of use.

In school the word "illustration" generally means a picture. From baby days children love pictures, and teachers and publishers alike are increasingly desirous of satisfying this love. If one can judge the demand from the supply of children's books, for use both in school and at home, it seems that the pictures most popular amongst children are those that are coloured, as large as circumstances allow, and "pretty". The Binet tests show that a child of five can distinguish between a pretty face and an ugly one. This discrimination implies the birth of an aesthetic sense. From that time on till a child receives a special artistic education such as few get, he continues to prefer his art to be "pretty"; and the most successful illustrators of children's books—such artists as H. J. Ford, Rackham, Sheppard, Walter Crane, and Dulac—have numbered the quality of "prettiness" amongst their other excellencies.

Pictures in an antiquated style are not generally pretty or pleasing to a child. We have seldom found a child under twelve who liked the reproductions of medieval drawings in his history book, or who learnt anything from the contemporary portraits of Chaucer or Drake. These drawings have excellent effect when they are transcribed into a more modern idiom by a competent artist. The transcription should in every way be as accurate as the original. A child can be educated to appreciate the beauty of the old "Books of Hours" and Psalters—but such appreciation does not come by nature. The Quennells, authors of *History of Everyday Things in England*, provide excellent examples of the modernizing of the older styles of drawing.

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Further, when pictures are shown, every child should be able to see them easily. If the illustrations are in the children's books, the matter is easy. The problems arise when there is only one copy of the picture to be displayed to a large class. Too often a teacher merely walks hurriedly round the class with a small picture—picture post-card size—and no child has more than a fleeting glance at it ; or the teacher holds up the picture and bids the class look, when no one beyond the second row can possibly see it. Such a procedure wastes time and produces bad feeling.

A picture for class use then should be large enough for all the class to see easily. Schools have wonderfully improved their collection of pictures in the last ten years. Certain publishers produce very attractive pictures of historical or geographical interest for classroom use.¹ It is also possible to buy at reasonable cost good large reproductions of famous pictures. On the whole the German prints are cheaper, and not inferior in quality to the English ones. The railway companies publish and sell excellent posters and generally make a fifty per cent. reduction for schools. If there is no money available, it is always possible to go into a travel agency and beg posters that have already been displayed. One seldom goes empty away. In addition bodies like the Wembley Exhibition or the Empire Trade Council will often provide posters for schools free of charge.

In the selection of posters, as everywhere else, the child's point of view must be kept in mind. Children greatly like the L.M.S. poster of a knight on horseback before a portcullis which advertises Carlisle, and such a poster would be a useful illustration in school. They also like many others :—the Norfolk Broads, the streets of York of the L.N.E.R., and many of the P.L.M. Railway's posters of Southern France ; but there are

¹ An exhibition of those selected for use in London Schools can be seen in the County Hall, Westminster.

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many posters which are designed entirely with the object of catching the eye of the adult passer-by, and of reminding him by a picture of two grouse and an engine, that the L.N.E.R. will take him to Scotland in October, or by glowing orange in a black oval surmounted by black streaks that "It's warmer and drier below" in the Underground! Such posters, however gay, are not likely to be good illustrations for school subjects.

Students in training are always asking whether they should make their own pictures if they cannot otherwise come by them. With the atrocities in one's mind that one has sometimes seen, one is tempted at once to say, "No, not unless you can draw and paint well." Yet one remembers that children greatly appreciate a picture that "teacher" has made for them, and that many a bad picture has undeniably helped an otherwise dull lesson. At home, one draws cows and pigs, men and women, to illustrate the tales one tells to one's child friends, and, however execrably one draws, the child enjoys the pictures. He cannot learn anything from them, and it is an open question as to whether one is corrupting his taste. The commonsense way out is probably the best one. If you are bad at drawing, then do your best to improve yourself in that particular, and do not publicly indulge your weak talent more than necessary. Your friends may be budding artists, and will help you. You may be able to trace drawings instead of doing them freehand, and you will, of course, keep your eyes especially wide open for illustrations that will relieve you of the necessity of providing your own.

The third consideration in selecting a picture for use in a lesson, that it must illustrate but not confuse, has already been mentioned. If the picture has a point of its own more interesting than, and quite different from that of the lesson, confusion will result. It would be a mistake to use a picture of two ships grappling in mortal fight *merely* to show the make of Elizabethan ships. A

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ship sailing on a calm day, on no apparent business, would be much more suitable. The battle picture starts too many trains of ideas not immediately relevant to the matter in hand. The class tend to think of the fight and fighters—not of the make of the ships.

The illustration of Literature is a great problem. Of many subjects, e.g. *The Quest of the Holy Grail*, *Elaine*, the *Ancient Mariner*, there are first-class pictures by well-known artists. Should reproductions of these be shown or should the class be asked to call up its own pictures? There is no doubt that individuals differ in their need of pictures. Some children benefit greatly by the illustration, the story gains new meaning, and points, only half realized, become vivid. For example, many people can only realize the colour in a scene when they see it painted.

Fra Lippo Lippi's dictum remains true for many of us with reference to reading as well as to pictures.

We love when first we see them painted
Things we've passed perhaps a hundred times,
Nor cared to see. And so they are better painted—
Better for us which is the same thing.

For other people, the illustration is simply an impertinence and destroys their own imagined and superior version. If the illustrations are bad, the resentment provoked is overwhelming.

Some people would compromise and provide the children with the elements from which they can imagine the scene, and not with a picture of the scene itself. From separate pictures of harbour towns, lighthouses, a kirk, and medieval ships, most children can imagine the scene of the return in the *Ancient Mariner*. One of the writers can trace to some separate illustrations or experience the different elements out of which she constructs her mental picture of *Blow, Bugle, Blow*, and any artist's picture of that scene, however good, would never satisfy her as well as her own, although such illustrations might *enrich* her own picture. The fact

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seems to be that the child's, or even the adult's imagined scene is not a "picture" in the ordinary sense of the term. A "picture" has the qualities of composition, light and shade, and is subordinated to all the conditions necessary in representing three dimensions on a two dimensional plane. But one's imagined scene is often closer to reality. We are conscious of its three dimensions, we may be lucky enough to feel the quality of its atmosphere, we may have auditory imagery strong enough to make us hear the sounds! No wonder that the mere visual illustration is, to such a person, a poor and thin business! Here as elsewhere then, choose the middle way. Use for Literature all the relevant illustrations that History, Geography, or Nature Study books or pictures will provide, whether in elements or in complete scenes ; but see to it that the child who can imagine for himself is never made to feel that the artist has said the last word on any poem, novel, story, or play. Encourage him to turn all to his own uses. The joy of literature lies largely in this provocative appeal to one's imagination.

In the use of pictures as illustrations the most important thing is that the picture should have time to yield its full value to the children. A good picture should hang on a wall where one can look at it whenever one wants to. In this way it becomes a part of one's life, and such merit as it has passes insensibly into the beholder. But it is often necessary to use a picture for a particular lesson. There is a superstition that one should have one's picture rolled up in the desk. One talks about the subject to be illustrated, and then at a certain point, out the picture comes, like a rabbit from a hat with a "Well, then, now look at everything I told you about!"

This rabbit-out-of-the-hat method has many defects. The early part of the lesson lacks the vividness and interest that the picture would have given ; the picture produces disturbance and excitement at the moment of

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its production : the children want to gaze at it for a time, to talk about it, and the end of the lesson being at hand they are not allowed to do so. The teacher does not want to repeat all the points he has already made, and the picture is snatched down and rolled up before the class has half exhausted its possibilities for enjoyment or edification. Such treatment, once or twice repeated, makes the class uninterested, or so eager to crowd observation into the short space allowed for looking that confusion becomes worse confounded when another picture is shown in later lessons.

Thus a large picture should be allowed to become thoroughly familiar. If it does not usually hang in the class-room, it should be put up in a position where it can easily be seen some time before the lesson. Call attention to it at the beginning of the lesson, refer to it throughout, invite comments on it, and have it up when the lesson is over so that the children can examine it at their leisure. Then words and picture will have become one in the children's minds. Or, if for some cause, the picture is shown for the first time at some particular point in the lesson, see that the time chosen for its display is apt, and especially that the children are given plenty of time to look at it and discuss it. It is always an advantage to have the picture on view for some days after the lesson.

Smaller pictures are easier to get but harder to use than big ones. They can be taken from books or Christmas annuals; good picture post-cards form excellent illustrative material; for learned matters the British Museum's publications are most useful; for art, the Medici Society's. For geography an intelligent teacher collects as she or her friends journey, and some firms publish special travel pictures, conveniently arranged in sets. A few shillings judiciously expended will secure quite a good collection. It is often possible to buy very handsome illustrated books as new remainders, remove the pages of pictures and so get really good reproductions

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of decent modern drawings for about one penny each. The children will generally join in the picture hunt with avidity, and few families are without one wandering relative who sends picture post-cards.

For general purposes it is well to mount the post-cards or small pictures on brown paper and put them up in the class-room. They can be looked at and studied at the children's leisure. They should be referred to in class and the children encouraged to talk of what they have learned from them. The use of pictures for revision is discussed elsewhere.

Different problems arise with the use of models. A model is useful when the thing cannot be studied directly either because it is too big, e.g. the whole river valley, or because it is too small, as in the case of a microscopic object, or when it is inaccessible in our present circumstances, e.g. when we have a model eye or ear for ordinary class-room use, because we cannot dissect the real one. Within these fields models are useful. They are a simplification, a substitute, and they make no claim to anything more than convenience. It is very different in some other spheres. As aids to artistic appreciation models are almost useless. Architecture is often represented by models, but this representation entirely fails to convey any idea of the original as an artistic product. The model may be exact, and the only thing changed be the size, but size is so essential to architecture that the model tends to change the sublime into a pretty toy. It is possible, however, to correct and complete the inadequate impression of the model by good pictures of the original. Worse happens when the model makes some pretence of repeating the original. A teacher giving a lesson on ancient books made a Roman book, complete with rollers, red painted back and a Latin poem inside. The only real difference from the original was the paper. Being unable to get suitable strips of stout white paper she had used thin. She told the class that this was inaccurate, but for all that the children

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continued to the end of the lesson to ask questions about the paper, and left the class-room commenting on the curious Roman custom of using thin paper for their books. The closeness of the model in most respects may have made this particular inaccuracy the more misleading, but a wrong impression vividly conveyed is very hard to eradicate.

Sometimes the illustration makes no claim at all to accuracy, and then, almost certainly, wrong notions are conveyed to the children. Clay models of prehistoric weapons give uncritical children an opportunity of thinking how easy they were to make and how ineffective. Bark shoes to represent leather, Greek sandals of shoe socks and tape—all these and many more makeshifts give an entirely wrong impression of a period, even though the children may know that the illustrative material is inaccurate in certain respects. Many an adult, nurtured in school plays, thinks unwittingly of the Elizabethans as a race dressed perpetually in sateen and of the Greeks as always wearing butter muslin.

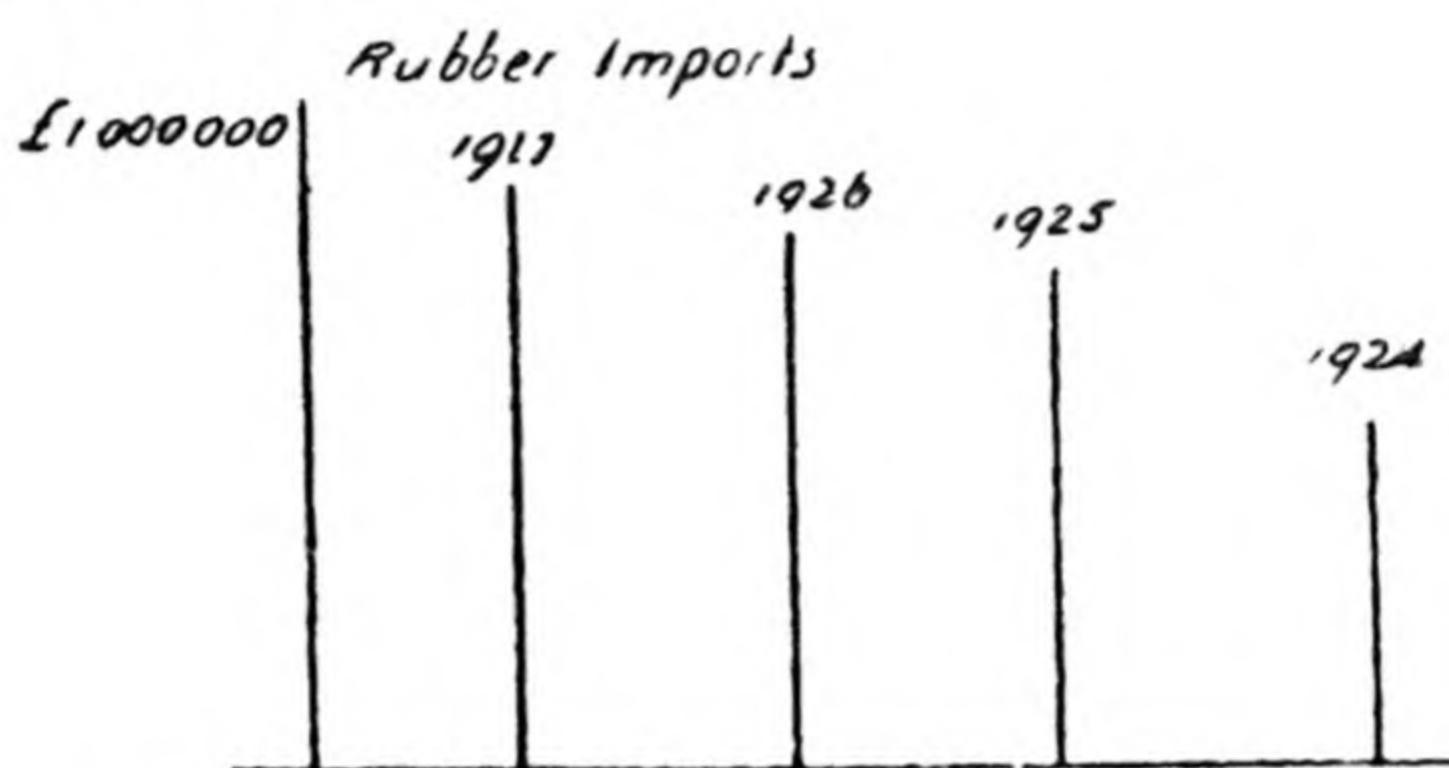
Models then (unless they are obviously simplifications made for some special case), should be really exact or else omitted. A picture, which cannot be mistaken for reality, is less deceptive than an inaccurate model.

The diagram is the most abstract way of representing anything. For this reason diagrams should not be introduced before the children are ready for them, and for many years the teacher must see that the child has the wherewithal in his mind to translate the diagram into meaningful realities.

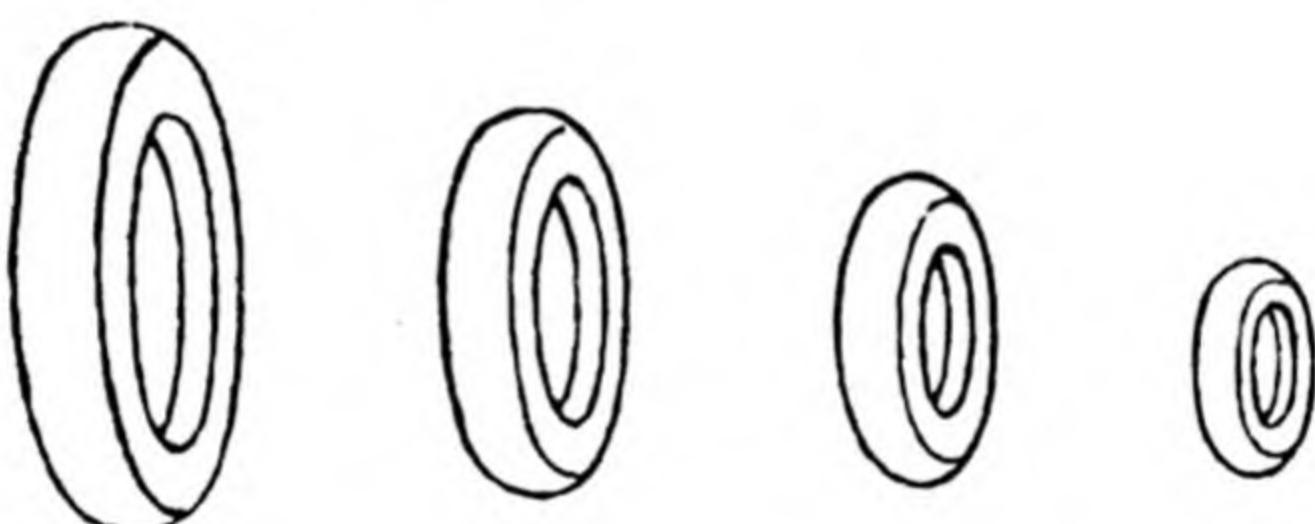
The little children of the 1890's who had only the map to illustrate the long lists of capes and bays they learnt, had small idea of the real appearance of the land they studied in such barren fashion. But when the children are familiar with the meaning of the map, the graph, or the chart, these methods of illustration are excellent. They should certainly be available for use

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in the top standard of the elementary school. And then, the more abstract the diagram is, the better. The diagram of plain lines and curves is far more informative than that composed of pictures of huge cigars, bags of wheat and assorted oxen. The imports of a country are more readily and definitely understood if they are represented like this :—



Than if they stand as



In the first the comparison can be made directly by means of the vertical and horizontal lines, in the second the varying sizes cannot be calculated with anything like the same degree of exactitude, and the area as well as the vertical height of the figures has to be considered.

The diagram helps those who think visually, it is also useful in keeping the mind clear among a welter of figures. If the export or import figures are given for twenty years it is an unusual person who can keep clear in his mind the fluctuation of trade during that period. If a diagram is given the matter is simple.

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Suppose this figure were required to illustrate the effect on an industry of a strike at A and the imposition of a tax at B. There can be no doubt about the matter. A definite impression is produced at once, and, if it is required to make any exact calculation, all the figures are readily available, given in the diagram.

A material illustration can vary from the indispensable to the derisory. If a lesson is concerned with the physical properties of a substance such as coal, it is absurd not to provide actual specimens. So in Nature Study, the more elaborate diagram or model is no real substitute for the living specimen.

To tie a whole lesson on Egyptian religion to a single (probably faked) scarab is ridiculous. The teacher is in exactly the position of the sailor who, recounting his adventures in the bar parlour, said :

“ Yes, she went to pieces like a pack of cards, and there was I clinging to a spar. I hung on for four days, and then I lost her. I was just about to sink when I bumped into a match box and I hung on to that for a week and then a liner picked me up—*and here is the match box to prove it!* ”

Similarly placed the teacher tells the tale of Joan of Arc, and clinches the matter with, “ And look, here is a stone from Rouen market place that I got when I went there.”

QUESTIONS FOR DISCUSSION

1.—Describe the illustrations you would use for lessons on :—

- (a) *Goblin Market* (Rossetti).
- (b) Life in the Sahara.
- (c) Monks and Monasteries.
- (d) The Buttercup.
- (e) The Plagues of Egypt.
- (f) Courage.

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- 2.—Make a list of ten well-known pictures and say how and where you would use reproductions of them in teaching.
- 3.—Discuss the use of models in the teaching of History or Geography.
- 4.—Collect examples from your own reading or from sermons or lectures you have heard of apt and of inept illustrations.
- 5.—Consider the similes in a good poem or prose passage and say why they illuminate and enrich the subject.
- 6.—How could you interest children in the collection and making of illustrative material in schools ?
- 7.—Of what value are the following as illustrations :—
 - (a) Cigarette cards ?
 - (b) Toy models ?
 - (c) Local shops ?

BOOK

JOHN ADAMS, *Exposition and Illustration in Teaching*.

QUESTIONING

*"Her taste exact
For faultless fact
Amounts to a disease."*

To ask questions well is one of the most difficult arts in ordinary life or in teaching, and the teacher's questions are harder to ask well than those of other folk. The reason is that out of school questions are asked in a natural way in order to elicit knowledge which we do not know ; in school questions are asked in an unnatural way in order to see if the other person knows something of which we are already informed. To the policeman we say, "What is the best way to get to Plumstead ?" because we want to get there and do not know the route ; but to a child we say, "How many pennies in two shillings ?" because we want to see if *he* knows ; we do not want the information ourselves.

The result is that, questions in school being unnatural, the teacher has had to develop a technique of questioning in order to do it well, because though the teacher does not want to learn the answer to his question he does want to find out something. He wants to know his pupils' state of mind or the amount of information they possess, or both of these things, and if he does not ask his questions skilfully he may easily fail of his object.

The teacher may use questions at any point in a lesson ; but especially are they important at the following points :

(a) During the "Introduction" of a lesson questions are used, to discover the ideas which the children already have on the matter about to be presented to them. The number and pertinence of these questions depends upon the teacher's familiarity with his class.

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If he is their regular teacher he will know what to expect of them. If he is a visiting teacher (e.g. a student doing School Practice, or a Training College Lecturer giving a demonstration lesson) these *exploratory* questions are extremely important. The whole lesson may have to be altered to fit the answers given. These answers often show not only the knowledge possessed by the children, but also the methods by which they have been taught, and the lines along which they have been trained to work.

Here the secret of successful questioning lies in the teacher being quite clear as to what he wants to know about the children's state of mind. A teacher, new to the class, is about to give a first lesson on verse making to elementary school children of eight and nine years, in Standard III. His first task is to discover from the regular teacher and from the children which of the children's previous experiences he can use. Of course the subject of the lesson limits the field of selection. It will probably not be relevant to refer to their lessons on Trade Winds or Frogs, but it will certainly be much to the point if he can discover what they know of time in music, whether they can distinguish between sad and merry tunes, whether they know what rhyme means, and what poems have captured their fancy. The wise teacher will, therefore, be prepared with clear direct questions whose answers will enlighten him on these points. He will notice whether the children give "parrot" answers, for which topics they show enthusiasm, and what indication they give of their relevant experience outside school.

Secondly, questions are used to recall to the children's mind ideas which they will need for understanding the new material about to be presented to them. These ideas have been acquired in previous lessons in school, or in ordinary life. A History lesson on the Crusades necessitates the recalling of the child's previous ideas on the Arabs and Mohammed. A Nature Study lesson

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on the buttercup is helped if the children can recall the appearance of fields in June.

Thus these introductory questions often involve a brief revision of a previous lesson. A nice sense of proportion is essential here. An inexperienced teacher may spend so long over this revision that he not only kills the children's interest in the lesson but leaves himself no time to deal adequately with the new material. The only excuse for this excessive revision is the discovery that the children do not understand what they have been taught previously.

(b) During the progress of a lesson questions are used to provide a helpful break in a narrative and to assure oneself that the class is following. These questions should be used only with great discretion. Too often a story which a child is following with rapt attention is spoilt for him by the inept, awkward, or prolonged questioning of the teacher. Instead of the straightforward revisionary question, the teacher might provoke interest by asking for forecasts of what will happen next. The answers should give an idea of whether the children have been following intelligently or not. Questions of the type of, "What would *you* have done had you been in Peter Pan's place?" "Tell me what you think Columbus might do to make friends with the natives." "Which person in the story will turn out to be the truest friend of the hero?" are useful here.

Or a picture may well be shown of an incident that has just been described, and the children asked to tell what it is all about, what the people in it are saying, or why they are in those particular circumstances.

Quite often these breaks are unnecessary. The children's power of prolonged attention, the teacher's skill in narrative, the interest of the material narrated, will all be deciding factors as to whether pause questions are judiciously introduced or not.

Questions are also used to lead the children to discover new facts or new problems for themselves. This use of

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questions is most obvious in a scientific or semi-scientific lesson, and it is a method that is open to great abuse. There used to be a feeling that everything could be "elicited" from the children ; and much boredom resulted, much time was wasted, and many little minds were starved while the teacher ruthlessly pursued his determination to "make the child discover for himself" a fact he would have enjoyed and remembered much better had he been told it. If the teacher uses this "eliciting" method he must know just at what point to step in with the helpful fact. If the children know the connection between types of vegetation, rainfall and temperature, it should be possible to show them the necessary maps of Australia and to elicit from them its probable vegetation. But unless they know the necessary data the attempt to elicit will simply involve waste of time. Of course the facts of rainfall, temperature and altitude might themselves have been "elicited" in previous lessons from other facts known to the children. Yet on almost every occasion it is essential that the cold fact deduced by the child should be enriched and brought to life by ideas, descriptions, narratives, and pictures contributed by the teacher. Ideas and knowledge that matter to any individual are never *merely* the bleak conclusions from given premises, and except in very special circumstances the entirely "elicited" lesson is likely to be a very bare, mechanical affair. To take a particular example : it is perfectly possible to elicit from a class that Corsica, being one of the Mediterranean countries, will have vegetation resembling the South of France and Italy ; and that this vegetation will include such widely spread trees as olives and, at higher levels, chestnuts or pines. But it is impossible for a class to know anything of the vegetation peculiar to the island : the maquis with its scented sheets of white bloom, the amazingly sweet sunbaked thyme, or the strange habit of the local pine trees of growing *lower* down the mountain side than the

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deciduous beech or silver birch. All these things must be told the children by one who knows, and until they are told the children's ideas will be so poor that Corsica is entirely undistinguished from all the other countries near it.

Questions also direct observations. This is another form of the type of question discussed in the previous paragraph. In a Nature Study lesson and in Science lessons the children have the requisite data before them. The teacher's questions should lead them to order their observations and to make them accurate and significant by connecting one with another. In a lesson on a growing seed attention is directed to points in order—the size, the root, the shoot, etc., and the children thus build up a general idea of the seed and its growth. The danger is that such lessons being planned by the teacher according to a set botanical scheme may become mechanical and monotonous, and completely fail to follow the lines of the children's natural interest. School children like flowers for smell or for colour ; they do not care much for technical exactitude, nor seriously concern themselves about the lanceolate or ovate shape of the leaves. Instead of a discussion of the flower in life or art the teacher questions conscientiously according to his regular pattern. "Look first at the leaves. What colour are they ? What sort of edges have they ? Are they smooth or rough ? Now look at the flowers. How many petals have they ?" etc. This procedure repeated *ad nauseam* will kill any incipient love of Nature. Questions that direct observation should take account of the children's natural interests as well as botanical arrangement of formulae. No teacher should ignore the hope of the blackberry when dissecting the flower.

(c) Questions are also used at the end of a lesson, to lead the children to formulate a general rule from the specific examples that have been given. This summarizing is essential in lessons which have aimed at the teaching of a rule, e.g. certain Grammar, Arithmetic,

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or Science lessons. These questions are frequently the most difficult of all to frame, for the process of mind by which the children select the significant examples and generalize from them is a very complicated process in itself, and the teacher has to frame his questions to assist this process and also to test it when accomplished.

Suppose a lesson has been given in which various examples have been used to demonstrate that a fraction divided by a fraction equals the same fraction multiplied by the reciprocal of the original divisor. The children will have been shown that $2 \div \frac{1}{2} = \frac{1}{2} \times 2 = 1$, that 2 taken 3 times = 6, that 6 taken $\frac{1}{3}$ times = 2 and much more to the same effect. We want them to deduce the rule that to divide one fraction by another you invert the divisor and multiply. Careful questioning must lead them to review what has been done in the examples given, and to observe the significant fact in each. The inversion might be brought to their notice by the use of coloured chalk. Then they are asked, "What have we done in each of these examples?" and "Tell me then what we do when we want to divide one fraction by another?" and the generalization offered should always be tested by the application of it to new examples. The trying out of hypotheses is an essential experience in the education of the child.

Questions at the end of a lesson are used for revision. The answers to revisionary questions should enable the teacher to judge the success of his lesson, and should be the means by which the child weaves together the various ideas gained during the lesson. The amount of time spent in this revision will depend upon the intelligence of the children, and the difficulty of the material. With dull children it is advisable to spend a comparatively long period in revision. If the material is difficult, the children will gain much from a careful revision of it, since not only will they be compelled to make a personal effort in relation to it, but the matter itself will be presented in a rather new way. Suppose the class has been having

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a lesson on fourteenth-century London, the revision might take the form of questions on the life of the boy of the period : how he was educated ; what he ate, wore and read. This revision forces the children to make the effort to answer, it revises their knowledge, relates it to other points, and emphasizes the really important items.

(d) Lastly there is the drill question. Certain pieces of knowledge require to be known automatically so that the stimulus will produce the response without any waste of time in thought. Multiplication tables belong to this class ; so do certain linguistic facts, such as the case governed by *coram* or *adversus*. One way of teaching these facts is by questioning until the responses are completely known. Such drill questions can well be asked either at the beginning or end of a lesson. They should be asked only for a short period—five to ten minutes—and their merit is that they should be rapid and precise. The same thing applies to some types of mental Arithmetic. The problem for the teacher is to keep up a steady fire of these brief questions, which are all separate and yet do not appear to be unduly disconnected.

All these types of questions are somewhat different from examination questions, which are discussed in a later chapter.

Children respond very differently to questions. Sometimes one sees a class eager and excited, child striving with child to get his answer taken ; and one sees the same class at another time completely apathetic, and having to be driven to answer. Nothing is more trying to a teacher's patience or self-respect than to find nothing but deadness when the success of the whole lesson depends on the children contributing their share through intelligent answers to his questions.

The fault is not generally in the children, but in the questions. What, therefore, are the general characteristics of good questions ?

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(a) The children must understand the questions. The words used should be familiar and the question should be stated clearly.

Most children of eight and nine would not understand "What properties has water?" or "What is the metre of this poem?" Instead the teacher must say, "What is water like?" or "Try and beat time to this poem and see how it goes." Such questions are not nearly so exact scientifically, and, of course, are not absolutely fool-proof; they may be misunderstood, but, on the other hand, they are likely to produce the answer required, while the other type of question is almost certain not to do so.

The teacher's difficulty is that it is not always easy to frame a question in these simple words, or, indeed, with the more inarticulate teacher, to frame the question at all. As a result another kind of obscurity develops, and with each attempt at explanation the speaker blunders deeper. The teacher perhaps wants to talk about imported fruit, but does not like to ask the direct technical question: "What fruits does England import?" Instead he starts on the indirect and personal tack, and his question as actually asked takes something of the following form:

"When you have been coming to school, what have you seen? I mean, in the shops on your way to school? If you keep your eye open you have seen lots of interesting things, in fruit shops. Now tell me, what have you noticed in fruit shops along the Old Kent Road?"

In the attempt at clarity the teacher has produced confusion which puzzles the children, and, by irritating the class, is bad for discipline.

The teacher also puzzles the class if he asks two questions in one. "Who did what, and why did he do it, when he thought the Puritan soldiers were going to capture him?" is a bad question. Even composite questions of a simpler type such as "Who was Robin Hood, and why did he do what he did?" confuse younger children.

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It is good, too, to avoid unnecessary repetition. If we say : "Did you take long to do this ?" it is unnecessary to add, "Or were you quite quick about it ?" It frequently happens that the child gets ready to say "yes" to the first half of the question, and when the second half is added, says "yes" all the same, thus leaving the teacher uncertain and laying himself open to a discouraging rebuke.

(b) The question should limit the field from which the answer could be drawn ; it should make it likely that the answer will be relevant to the matter in hand. Questions used to introduce lessons are most frequently at fault here, as has been shown.

A teacher once opened a lesson on "Big Steamers" with the following question, uttered in reverent mystic tones, "Now, children, tell me, what have we here in the room with us to-day ?" The children, utterly nonplussed, gazed round the ceiling and the walls ; looked at the visiting students and training-college lecturer, and remained silent. The question was repeated in a yet more earnest voice. Then the guessing began. "Please, miss, new teachers," and "Fresh air," and "God," and "Our clothes." There was no limit to the proposals. They were all rejected. Then the teacher in a hurt manner answered her own question : "No—you are all wrong. We have here to-day with us the spirit of *Rudyard Kipling*!"

The objection to such questions is not only that they waste time, but that the teacher cannot deal satisfactorily with the answers. If he refuses to be led into irrelevant discussions, he will have to waive aside the children's perfectly good suggestions with, "Well, yes, but we are not going to talk about that to-day," or "I don't want that," or he will continue to take answers till the one he wanted is given and then, without any explanation of why he accepted that and refused the others, will continue his lesson. Such treatment puzzles and annoys the children. They feel that with so little

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to guide them, answering becomes a guessing game in which they have to discover what this curious creature, their teacher, wants. Those children who exert themselves and are not lucky, are disappointed, and likely to remain silent during the rest of the lesson.

The question should, as a rule, admit of only one correct answer, so that the teacher can say to each child's answer, "No," or "Yes," or "That is nearly right," and can show further why the answer is right or wrong.

Questions which are ambiguous or which give the pupils a chance to be funny at the teacher's expense, are, at least, unwise. If a teacher says, "Johnny, how was it I saw you snatching Willie's pen?" he must not be surprised if Johnny, being a sharp lad, retorts, "Because you turned round too soon, sir." And if a teacher says, "Can you give me a description of a monastery?" expecting that description, the pupil is within his rights in answering, "Yes, I can," or "No, I can't," and leaving the matter there.

The theory that questions are bad which demand only "Yes" or "No" for an answer is frequently applied too strictly. If a pupil has only to answer from two alternatives there is an even chance that he will *guess* the right answer without troubling to think. But if his answer is met with the further question, "Why do you think so?" mere guessing is out of the question. Thus one might ask, "Was Polyphemus overcome by Odysseus?" and then follow up the answer "Yes" by "How did Odysseus win?" put to the same child.

But it is a daring or a stupid teacher who asks: "Do you like this poem?" and follows up the reply by: "Why do you like it?" Adults find great difficulty in giving reasons for their likes and dislikes, and it is often impossible for children to do so. If they are cornered they will either repeat some catch-phrase that they have heard, or will invent some lie to satisfy their tormentor. Such was Wordsworth's experience.

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I have a boy of five years old ;
His face is fair and fresh to see ;
His limbs are cast in beauty's mould,
And dearly he loves me.

One morn we strolled on our dry walk,
Our quiet home all full in view,
And held such intermitted talk
As we are wont to do.

My thoughts on former pleasures ran ;
I thought of Kilve's delightful shore,
Our pleasant home when spring began,
A long, long year before.

My boy beside me tripped, so slim
And graceful in his rustic dress !
And as we talked I questioned him,
In very idleness.

" Now tell me, had you rather be,"
I said, and took him by the arm,
" On Kilve's smooth shore, by the green sea,
Or here at Liswyn farm ? "

In careless mood he looked at me,
While still I held him by the arm,
And said, " At Kilve I'd rather be
Than here at Liswyn farm."

" Now little Edward, say why so :
My little Edward, tell me why."—
" I cannot tell. I do not know."
" Why, this is strange," said I.

At this my boy hung down his head,
He blushed for shame, nor made reply ;
And three times to the child I said,
" Why, Edward, tell me why ? "

His head he raised—there was in sight,
It caught his eye, he saw it plain,
Upon the house top, glittering bright,
A broad and gilded vane.

Then did the boy his tongue unlock,
And eased his mind with this reply :
" At Kilve there was no weathercock ;
And that's the reason why."

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Another much criticized way of limiting the field from which the answer can be drawn, is elliptical questioning. This consists of making an incomplete statement, and leaving the pupils to finish it. "Moses was given the tables of the law on Mount — ?" The inflection of the voice makes the interrogation. "Magna Charta was signed by King — ?" The chief objection to this type of question is that it encourages the child to depend on rote memory. The teacher too often uses the statements that he has used in the lesson ; and the child does nothing new in the arrangement of the material.

Some people would also object to both "Yes" and "No" answers and to these elliptical questions on the ground that the child should make "complete sentences". This idea is based on the feeling that every lesson should be a training in oral composition, and oral composition as seen in most schools is that stilted unreal hesitating utterance in complete sentences which has no life and affords no training in natural speech. If a question can naturally be answered in one word, it is absurd to make the child say a sentence. "What is your favourite lesson ?" asks the teacher. "My favourite lesson is History," answers the well-drilled child, and once more reminds himself how unreal this school business is. If the teacher wants to give the children practice in connected speech, let him frame his questions accordingly. "Tell me about the lesson you have liked best to-day." "Tell me how a monk spent his days in the monastery." "Describe the dress that the Lost Boys wore." "How did Wendy help Peter ?" The give and take of questions and answers should do much more than at present to make the children at ease in conversation and debate.

(c) Questions should be interesting. If routine questions are asked, purely for "drill" purposes, the time given to such questions should be short, and the teacher and children fresh enough to carry the thing through brightly.

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The revision questions asked at the end of a lesson most frequently offend by dullness. The teacher tends to use again the same phraseology that he has used all through the lesson, and expects the children to use that phraseology in their answers. He is thus encouraging and testing only rote memory.

In most lessons the teacher aims at more than imparting mere information to be remembered and repeated parrot fashion. The questions, therefore, should provoke thought, and suggest a new aspect of the subject. Every teacher is aware of the sudden drop in interest when, an interesting story being finished, he proceeds to revise it by questions following the story step by step. Other methods of revision are possible. Pictures might be shown, and the children asked to describe the incidents to which they refer. A discussion of the characters would lead to a review of the incidents. One teacher found it helpful to let one child impersonate the villain of the piece. He was put on trial. The witnesses were children impersonating other characters in the story. Thus not only the incidents, but the ethical implications of the tale were revised and discussed. In another case a character in the story might narrate the tale from his point of view.

Various "practical" reviews are also possible. The older children write a summary, old and young sometimes dramatize (a method to be used only after much forethought and with skill), illustrations in colour or clay are made. These methods are discussed elsewhere.

Since questioning causes even the teacher so much thought, it is clear that it is an art in which the children themselves could well be given practice. To ask questions clearly, we must first have the problem clear in our own minds, then we must find simple unambiguous language in which to ask it, and must put it unhesitatingly and clearly. All this is excellent practice in thinking and expression. Children and adults play many games in which questions are asked : "Animal, vegetable

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and mineral", "Chumps", "Thought-reading", are well-known examples. During lessons children should be encouraged to ask questions, and might also take part in the revision questioning at the end of the lesson.

The actual technique of taking an answer to a question requires attention. The children should be given time to think of the answer, but not too much time, or the bright ones get impatient. The teacher should make an attempt to get answers from as many members of the class as possible ; but in his efforts to make Jane in the back row reply, he should not consistently ignore the front row, nor leave children unasked who clearly know the answer to the question and are eager to give it. Some teachers ask several children their answers before saying which is correct. This method has advantages if not used to excess ; but if every question, even the simplest, is answered several times, it makes the lesson unduly monotonous.

Lastly, if answers to questions are not forthcoming, the teacher should reconsider his question or his approach to it ; he should not stamp his foot and say, "*Now, come along !*"

QUESTIONS FOR DISCUSSION

- 1.—Show how you would question a class to make the children give you
 - (a) the definition of a relative pronoun.
 - (b) the reason why the climbing season on Mount Everest is so short.
 - (c) the causes of the explorations of the sixteenth century.
Indicate what facts you would have to tell the children in each case, and what you could get in answer to questions.
- 2.—Suppose that you intend to take "Come unto these yellow sands" with Standard II. Say what points you would wish to bring out in relation to the poem, and give the questions that you would ask in order to make the children notice them.
- 3.—Discuss the advisability of breaking the narrative by questions in the case of (a) a fairy story ; (b) an account of the Armada ; (c) a description of a medieval town.

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- 4.—What do you think are the objects of the questions in :
- (a) the Church Catechism.
 - (b) the Marriage Service.
 - (c) *Sandford and Merton* (Day).
 - (d) The examination of a witness in a trial.
 - (e) A Socratic dialogue.
- When has the teacher in school similar objectives in his questioning ?
- 5.—Consider how far the ability to ask questions well is evidence of
- (a) knowledge of the subject.
 - (b) knowledge of the persons questioned.
 - (c) intelligence in the questioner.
- 6.—Describe with an example the Socratic method of questioning. How far can it be used in school ?

BOOK

PLATO, *Dialogues*.

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"It is ten o'clock :
Thus we may see, quothe he, how the world wags :
'Tis but an hour ago since it was nine ;
And after an hour more, 'twill be eleven ;
And thereby hangs a tale."

THE discussion in this and the following chapter, on promotion, must be taken in close connection with the earlier chapter on class-teaching.

It is claimed as one of the advantages of individual work that it largely solves the problems of making and working to time tables. If the child works at his own task at his own pace, he adjusts his own time table. He works as long or as short a time at each subject as he feels convenient. He is neither cut short in the middle of an interesting piece of work nor forced to drag out an unwilling attention till the end of a lesson. The absurdity of demanding that all children should be interested in Arithmetic at 9.30 a.m., and that that interest should hold unabated till 10.30, when it is instantly transferred to Geography, vanishes. The time table is shaped by natural interests, and the added stimulus of oral and group lessons comes in the afternoon, when individual interest is beginning to flag.

All this must be borne in mind, but as a full system of individual work is by no means general and probably not desirable, the difficulties involved in the class method must be discussed. It is also arguable that a good time table may be an aid to many children, and may help to form in them habits of regular work and of control of the attention. Everyone knows that, in later life, one of the most useful intellectual powers is the ability to bring the attention fully to bear on the matter of the moment, and to detach it as swiftly when the matter has been dealt

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with. A lack of this control of attention means that we are slow to start a new job, and, when we have finished with it and should be going to sleep or working at something else, thoughts of the past keep intruding themselves into our minds. Working to a time table in youth helps to cultivate this control, and the process of training is not felt as personally irksome since it is shared by all alike.

Indeed, it is highly debatable whether children feel a time table to be in any way irksome ; if, that is, the time table be made with consideration for their psychological needs. The span of children's attention is very short ; they are ready to drop a thing and take up another. To be active is their main concern.

Further, no sensible teacher is the slave of a time table. A few minutes more to one lesson may be a great gain ; a few minutes off another may be a yet greater gain. He will continue to regard his time table critically, and whenever it is a hindrance or a cause of discomfort to the children or himself, he will alter it as far as external conditions allow.

The school's time table has to be signed as approved by H.M. Inspector of Schools, and is generally also signed by the Director of Education or by the Chairman of the Education Authority on behalf of the L.E.A. But the approval of H.M.I. is only an approval of the *legal* distribution of times as between religious and secular instruction. In order to be accounted "open" and the children's attendances to be allowed for the purposes of government grant, the school must provide four hours of secular instruction a day, and the religious instruction must come either at the beginning or at the end of the morning or afternoon sessions, so that a child can be withdrawn from it if his parents so desire. This is provided for in the "Conscience Clause", which is hung in a prominent place in all elementary schools.

In practice, H.M.I. might make the occasion of his signing the time table the chance for discussing the

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allotment of time given to various subjects, and their position in the day's activities, but his signature does not imply that he approves anything but the division of time as between religious and secular instruction.

If an important departure is made from the time table, e.g. a school visit to a park or play, the fact is recorded in the log book.

A grown-up student's objection to a time table is that he never has time to learn anything while under its tyranny. The educated adult needs several days, or weeks, in which to bring his mind fully to bear on a subject. He needs time to find the books he requires, to read them, to compare them one with another ; and he needs comparatively long periods of meditation in which to see the connection between the different items of information they contain. A student may live for weeks, months or years and never really have a matter out of his mind ; a time table and a continual change of subject would render work of this kind impossible. But children are not scholars. They have not the scholar's interest in some one point of knowledge, and they have not the intellectual ability, nor the power of attention necessary for continuous work on one topic. A child learns more when his work is diversified.

The elementary school works generally in units of a week of twenty-seven and a half hours, of which two and a half are generally taken for Scripture (which parents may choose to forbid the child to attend), and in the case of infants a further two and a half hours is taken for recreation. In the upper school this latter period is shortened to at least one hour forty minutes per week. This leaves, in the upper school, not more than twenty-three hours twenty minutes for secular instruction.¹ Into this time must be fitted the ten or more subjects of the curriculum.

The time table is the practical expression of the teacher's belief as to the comparative value of subjects.

¹ *Op. cit.*, p. 28.

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The time allotted to each, and the time of day at which each is taken, depend to a great extent on this judgment of value ; but, they also depend on material conditions, and increasingly so since special rooms are used for particular activities. It is obvious that where one hall or one gymnasium has to serve some twelve or more classes, all cannot use it at the most desirable times from the children's point of view. Similarly, special rooms for Needlework, Handicrafts, or Science have to be in use at all hours of the day if every class is to get its share in the use of them. But a good Head will see that as far as possible the good times are fairly distributed, and that no one class has to bear all the burden of doing Physical Training or Needlework or Singing *always* at unsuitable times.

Mixed schools for boys and girls are the most difficult of all to plan for. The sexes are separated in senior schools for Physical Training, Domestic Science, Needlework, Hygiene, and perhaps unnecessarily for Gardening and sometimes Science. Often the girls or boys from two classes are then grouped, and this leads to endless and almost insurmountable complications in a time table. On these grounds alone, if on no others, one would always prefer to have senior boys and girls in separate schools.

But leaving aside these conditions for the moment, let us consider from an ideal point of view what considerations arise in the allotment of time to various activities.

If we look at the two analyses of time given below we can see some of the ways in which this allotment of time works. Many of the subjects receive the same, that is the traditional allowance of time. These are given ; other subjects are as follows :

School	A	B
	hrs.	hrs.
Arithmetic	3.20	5
English	7.40	8.10
Music	1.50	1.20
Physical Training	1.30	1
Handwork	1	0

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From this arrangement we can compare the values placed upon the various subjects. English is about five times as important as Physical Training and about twice as important as Arithmetic. School B does not think Handwork has any importance at all.

If, however, we try to compare the value attached by the two schools to the different subjects simply on the basis of the times allotted to each, we should probably be in error. School A worked out its time table according to much better principles than School B. The Arithmetic lessons in the latter are, on the whole, too long, and the shorter time devoted to the subject in A is probably just as effective, or perhaps more so. Again, merely from an inspection of the times allotted to Music, it would be impossible to realize the much greater place that subject held in School A. It is only when the *arrangement* of the lessons is taken into consideration that this is clear. The same is true of the Physical Training ; School B is extremely badly managed in this respect ; School A very much better. We must then observe several principles in drawing up a time table other than merely allotting as much time to a subject as we think represents its importance relative to the other subjects.

The first of these principles concerns the length of lessons. This must be adapted both to the age of the children and to the subject matter of the lesson. In infant schools lessons are seldom more than twenty minutes long ; in senior schools they can be forty-five minutes or even an hour ; in the intermediate standards there should be a progression from the shorter to the longer period. Too often a time table is drawn up for the whole of a department so that lessons are the same length in Standard I as in the upper part of the school. This is most unsatisfactory for the younger children, since, unless the teacher himself breaks up the lesson into shorter sections by differences in the

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type of work demanded, the class is almost certain to become tired and inattentive.

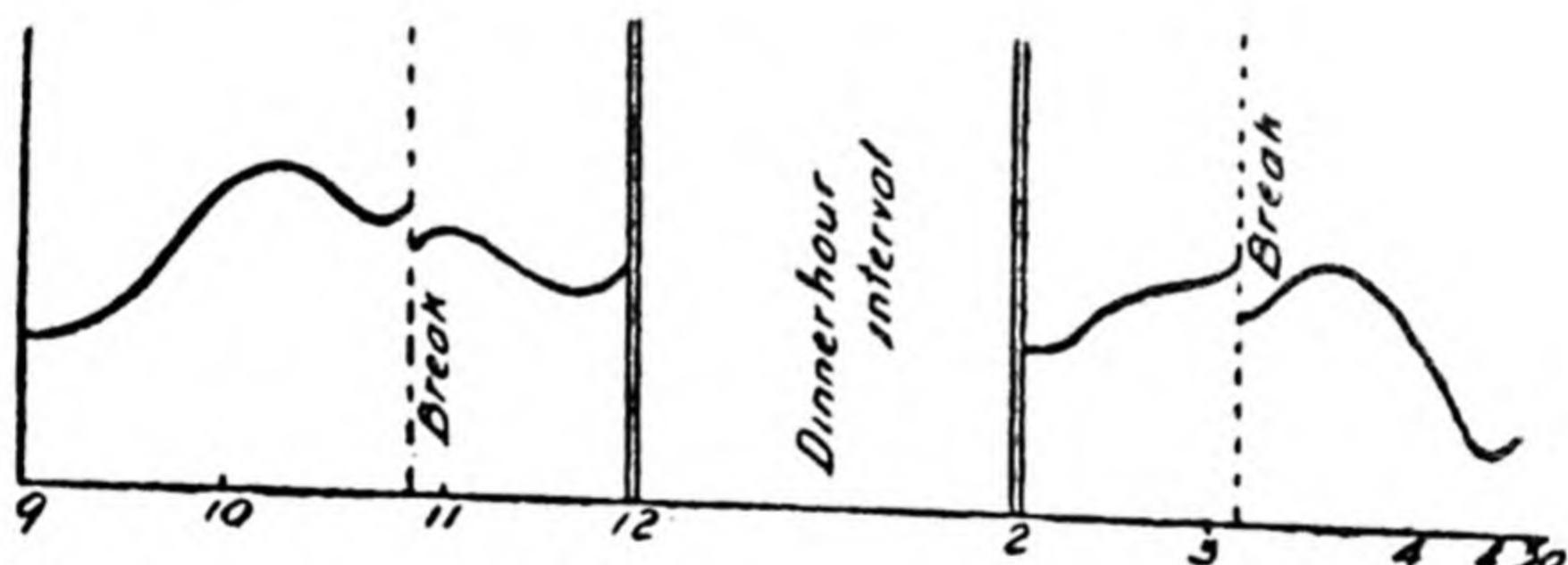
The subject matter and type of lesson also affect the appropriate length. Lessons which demand close concentration to intellectual work, those which consist in learning by heart, and those which are purely oral, should all be shorter than lessons which allow the children manual or physical activity. Thus Arithmetic lessons should rarely exceed forty-five minutes, even at the top of the school, unless the Arithmetic is of a practical nature, such as measuring or drawing. Lessons in which Spelling, Arithmetic Tables, or such matter is learnt, should be very short, only about ten to fifteen minutes, and the time which is required should be furnished by a number of short lessons, one or more a day rather than a single long one. Oral exposition is apt to become wearisome to the class and exhausting to the teacher if it is continued for longer than thirty minutes ; and such subjects as History and Geography should have lessons of thirty to forty-five minutes, the longer ones being partially occupied with writing or drawing maps. On the other hand, Drawing, Handwork, or Needlework could appropriately have longer periods ; yet even Drawing, especially with younger children, is best taught in periods of about thirty to forty minutes. The time actually occupied in distributing materials is short, and a young child's powers of representing an object are too limited to allow him to work at one thing for long. The model must be simple, or it passes his skill to comprehend, and a simple object, drawn as he will draw it with the materials at his disposal, is fairly quickly finished. We often find the harassed teacher with a young class and a long drawing period, making the quicker children do two or three pictures of the same yellow cricket bat, to their infinite boredom and his confusion.

Needlework requires less concentrated attention than Drawing, and there is more purely mechanical work in

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it. A girl can stitch one seam and go on to the next in a pleasant state of mental vacuity or while conducting an entralling day dream. To accomplish anything in Needlework one actually needs several hours ; therefore periods of one hour each for Needlework are not excessive. Much the same might be said of a good deal of school handwork.

The nature of the subject matter also determines the time of day when certain lessons shall be taught. Those lessons which demand a large expenditure of mental or emotional energy should be taken *fairly* early in the morning or the afternoon. The first periods in the morning or afternoon sessions are not the times when the children are most ready for concentrated work. An inertia or distraction follows breakfast or dinner and the journey to school. An experienced teacher drew a graph of the mental energy of his class throughout the day, as follows :



The waves upwards at 10.30, noon, 3.15, and 4.30 are due to the expectation of dinner or diversion, and are strictly comparable to similar rises in the curve in industrial output.

By general consent, in many districts, Arithmetic occupies what is supposed to be the most favoured place —immediately after Scripture in the morning. It is perhaps a good arrangement, but there is every reason for suspecting the motives which give it its place. From the days of payment by results to our own scholarship days, Arithmetic has been pre-eminently an examination subject, and one that could be taught by cram methods.

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On that account it tends to oust other subjects which may have greater cultural value.

Literature, for example, is a good candidate for participation in such advantages as the time offers. The appreciation of Literature, particularly poetry, requires an emotional effort quite comparable to the intellectual effort of Arithmetic. We find ourselves, that, when really tired, we do not think of reading great poetry, unless that poetry is already familiar to us. It is to the amusement makers without a message or a high fire of passion, that we turn at such moments.

The natural lessons with which to end the day are the manual—Needlework, Handwork, or those which allow an outlet for the impulses of childhood, such as Speech-making or Games. Unfortunately factors, quite irrelevant educationally, come in to upset this. Many schools always have Needlework the *first* two periods of the afternoon. The reason is that the schools in some districts are so badly supplied with water and soap that it is difficult for the children to wash their hands in school. Consequently teachers like to have sewing early before the comparative cleanliness of home has worn off!

Again, the last two periods on Friday afternoon are frequently devoted to Silent Reading, simply as a way of keeping the children quiet while the teachers do clerical work. There would, as often as not, be no loss educationally if the children were sent home at three on Fridays. A more suitable subject for the final hours of Friday afternoon, if the teachers had the time to attend to it, would be Speech-making, Story-telling, Play-acting, or some one of the other forms of English which involves activity of a pleasant kind. The reading of library books *at such a time* is mainly perfunctory and the children day-dream or fidget.

Another important principle of the time table is the necessity of variation. Just as prolonged attention to one subject is unduly fatiguing, so is prolonged attention to one kind of subject. For the sake of children and

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teacher there should not be a succession of oral lessons in the day, nor should a teacher be expected to take one big class for Handwork and then another for Needlework when the same kind of activity is required of him. The author of the time table should not make a practice of putting such lessons as History, Geography, Nature Study, and English in succession, but if the time table is so made, the teacher must see to it that he varies the type of lesson, letting the children draw a map in Geography after he has told a History story, or write a composition in History when he has just previously been explaining the germination of seeds. In some schools good use is made of such lessons as Singing, Physical Training and Dancing as a means of introducing variety into the time table. There is always a break about eleven for running about the playground ; another break, of about fifteen minutes, is introduced after Scripture, and in it the children sing or have some other lesson which involves physical activity. The same kind of thing is done in the afternoon.

The following examples illustrate various points in connection with time tables :

A
A school in a colliery village. Standard IV

	9-9.35	9.35-9.45	9.45-10.25	10.25-10.45	Play	11.0-11.30	11.30-12.0	Lunch
Monday	Scripture	Music	Arith.	Gen. Know.		Geog.		
Tuesday	"	"	"	P.T.		Comp.	Reading	
Wednesday	"	"	"	Dancing		History	N. Study	
Thursday	"	"	"	P.T.		English	Reading	
Friday	"	"	"	English		N. Study	Reading	

	1.30-2.0	2.0-2.20	2.20-2.50	Play	3.0-3.30	3.30-4.0
Monday	Comp.	Poetry	Music		Needlework	
Tuesday	Arith.	Poetry	History		Comp.	Reading
Wednesday	Draw.	Reading	Music		Handwork	
Thursday	Composition		Geog.		Needlework	
Friday	English	Drawing			Games	Reading

This time table has clearly been constructed with great attention to the principle of variety. In the

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morning Arithmetic is sandwiched in between Music and lessons of which three are active and the other two of quite a different type. Then comes play and then two lessons of which the second is generally Reading, which must be meant to be a lesson which the teacher can adapt to suit himself. In the afternoon there is the same care for the principle of variation, and the manual lessons nearly always come at the end. The lessons too are all short, and lessons such as Poetry and General Knowledge, where length of time generally means the destruction of the aim of the lesson, are only twenty minutes. Even Arithmetic is only forty minutes.

The following, from another colliery school, is far less satisfactory. It is for Standard VI.

B

	9.0-9.35	9.35-9.55	9.55-10.45		11.0-11.30	11.30-12.0
Monday	Scripture	Sing.	Theory	Arith.	Reading	Recitation
Tuesday	"			Arithmetic	Drill	Literature
Wednesday	"			Arithmetic	Geog.	Recitation
Thursday	"	Sing.	Theory	Arith.	History	Grammar
Friday	"	English	Exercises	Literature	Arithmetic	

	1.30-2.10	2.10-2.50		3.0-3.30	3.30-4.0
Monday	English	Geog.		Nature Study	
Tuesday	History	Reading		Composition	
Wednesday	Needlework			Drawing	
Thursday	Needlework			Reading	Recitation
Friday	Singing	Reading		Drill	Library

In this case the proposed break between Scripture and Arithmetic is Singing *Theory*, not Singing. English Exercises precedes Literature. Recitation follows Reading, and English, Geography and Nature Study come together. The early part of the afternoon is given to Needlework and the latter part to Nature Study and Composition or Recitation or Reading. One hour is rather a long time for Nature Study. There is most inadequate provision for Physical Training and none at all for Games. As might be expected, the level of work

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and behaviour is far higher in the school which has the first time table quoted, though the social and district conditions are much the same.

The general principles of the time table remain the same under any system, but a fresh complication is introduced when specialization among the teachers is attempted. This specialization may take various forms and each has a different effect on the time table. There may be complete specialization as in some Training Colleges or the upper classes of a secondary school, or certain subjects may be picked out so that one person does all the Music, another all the Needlework, and another all the Nature Study while taking a certain proportion of the remaining subjects; or a third way may be devised in which every teacher teaches all subjects but teaches them to different classes according to his special capacity.

Complete specialization is rarely possible or necessary in the elementary school. Moreover, many teachers dislike it, as being less interesting than teaching a variety of subjects; but partial specialization is exceedingly useful and important. The Training Colleges do not turn out teachers qualified to teach *every* subject, and the number of Head Masters who insist that even the most unmusical shall teach singing is decreasing. The Board of Education's suggestions entirely support partial specialization.

Quite apart from special gifts such as Music and Drawing, many people have an intellectual blind spot. In some it may be Geography, in others Poetry, in others Nature Study. It seems impossible for such people to like the subject, to see its importance or relevance, or to teach it with any conviction or exactitude. It is a misery to them, and the effect of their attitude will be clearly shown in their class. The teacher next door may have a similar blind spot, but for a different subject. It is obviously good policy to allow them to exchange

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lessons and avoid those which they dislike. Such changes involve alterations in the time table, but the advantages far outweigh the small additional trouble.

In re-organized senior schools there was at first an attempt to adopt a fairly thorough specialization. But experience has shown that this does not work. It breaks down in all directions. Some subjects, e.g. English, are so heavy that no one teacher can take them all, and even if a team of three or four work together, it is most difficult to arrange for all the English in one class to be taken by one person—and if it is not, then composition and reading become divorced, formal English is taught with no reference to the ordinary uses of English, "literature" becomes a queer kind of English which has no relation either to the poetry learnt or to debates. In many schools, therefore, the class teacher generally takes most of his own English. Physical Training is obviously a subject which calls for semi-specialization. The older men and women often find it too exhausting ; but no one teacher would want to take *all* the Physical Training lessons, or to do nothing else but Physical Training. If he did, his chances of a Headship would be prejudiced, and also at forty-five or thereabouts he, and especially she, would find it necessary to begin a new specialist line altogether. Also, in elementary schools some teachers come and go quickly, e.g. probationers often only stay one year. The L.E.A. with the best intentions in the world, cannot ensure that any one specialist can be replaced (as in a secondary school) by another specialist in the same subject, and so much heart-rending is caused and new time tables and syllabuses are always being made. Needlework, Crafts and Science are nearly always semi-specialist subjects. Domestic Science and Wood and Metal Work are entirely so, for the teachers are trained in specialist colleges, and although they are now qualified to teach general subjects, they rarely do so.

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The kind of specialization which seems to work really well in a junior or in a senior school, is for each teacher to be responsible for one subject for a period of time—say three or four years—to the extent of thinking and reading about it, attending lectures and courses perhaps, examining catalogues and new books, and generally making himself acquainted with what is going on in that subject. He will have been given it presumably because of some natural aptitude or special qualification, and he will probably teach it in two or three classes. At staff meetings he will enlighten his colleagues on it, and express his views. He will, perhaps, visit their classes when the children are doing his subject. He will make the draft scheme and advise the Head on all matters relating to that subject. He may set the test-paper in it. If everyone is so responsible for one subject, no one feels "dominated" by anyone else, and a really healthy co-operation is possible, while many of the difficulties and dangers of complete specialization are avoided.

QUESTIONS FOR DISCUSSION

- 1.—Draw up a time table for any one standard, and explain your reasons for the particular arrangements you give.
- 2.—Draw up a complete school time table for a school in which there is complete or partial specialization.
- 3.—What inconveniences have you suffered from the time table
 - (a) as a school child.
 - (b) as a student.
- 4.—Make a time table for your own use during the term. State clearly why you have allotted a certain amount of time to each subject, and why you have placed it where you have.
- 5.—If you were a governess in charge of one child's education (aged 11), how would he spend his time?
- 6.—What justification is there for the absence of strict time tables in infant schools?
- 7.—Consider how far the keeping to a time table in school is effective in establishing a habit of regular work in (a) running a house; (b) writing a novel; (c) preparing for an examination.

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TIME TABLE OF A MODERN JUNIOR CLASS (Aged 9).

a.m.	Monday	Tuesday	Wednesday	Thursday	Friday
9.0-9.35	Registration and Scripture.				
9.35-10.0	Physical Training.	Music.	Physical Training.	Music.	Physical Training.
10.0-10.45	Arithmetic.	English.	Arithmetic.	English.	Arithmetic.
10.45-11.0	Recreation.	Recreation.	Recreation.	Recreation.	Recreation.
11.0-11.30	English.	Arithmetic.	English.	Arithmetic.	English.
11.30-12.0	Nature Study.	Physical Training.	Music.	Physical Training.	Nature Study.
P.m.					
1.30-2.0	Music.	English.	English.	English.	Music.
2.0-2.45		History.	Geography.	Arts and Crafts.	History.
2.45-3.0		Recreation.	Recreation.	Recreation.	Geography.
3.0-4.0	Arts and Crafts.	Arts and Crafts.	Arts and Crafts.	Arts and Crafts.	Recreation.
					Arts and Crafts.

N.B.—Arts and Crafts = Needwork, Drawing and Handwork.
 English = All forms of English.
 Physical Training and Music come every day.

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TIME TABLE OF A MODERN SENIOR (A) CLASS (Aged 12).

a.m.	Monday	Tuesday	Wednesday	Thursday	Friday
9.0-9.35	Registration and Scripture.				
9.35-10.15	Mathematics.	Domestic Science.	Physical Training.	Physical Training.	Physical Training.
10.15-10.45	Music.	Domestic Science.	Mathematics.	English.	English.
10.45-11.0	Recreation.	Recreation.	Recreation.	Recreation.	Recreation.
11.0-12.0	History.	Geography.	English.	Mathematics.	Hygiene.
p.m.	English.	Domestic Science.	Music.	Arts and Crafts.	Arts and Crafts.
1.30-2.0		Domestic Science.	English.		
2.0-2.45		Physical Training.	Physical Training.		
2.45-3.0		Recreation.	Recreation.	Recreation.	Recreation.
3.0-4.0	Arts and Crafts.	Domestic Science.	Arts and Crafts.	Organized Games.	Arts and Crafts.

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N.B.—Longer periods because children are older and are an "A" class.
 Physical Training on four days with one hour's Organized Games.
 Arts and Crafts includes Needlework, Drawing and Handwork.

EXAMINATIONS

*"Who are going to meet their fate
In a highly nervous state ;
Still to us it's evident,
These attentions are well meant."*

WE are so much used to written examinations as an integral part of our educational system that it is difficult to realize that they are of comparatively late growth. Their rise was only possible when paper became cheap and writing was one of the fundamental tools of learning. Our ancestors of Shakespeare's day could hardly have done written examinations. In fact, written examinations of the present type were only introduced into the University of Oxford by the Public Examination Statute in 1800.

Previously to that, examinations for degrees were still partly medieval in form and the student was required to show his knowledge of some special subject combined with logic by conducting an argument before examiners. The remnant of that still exists in the *viva voce* examinations, which at Oxford succeed the writing of the papers.

The popularity of examinations in schools arose from two causes. The Board of Education's policy of payment by results familiarized the elementary schools with the idea of examinations, and made them practice for this ordeal ; in the secondary schools, especially those for girls, which sprang up in large numbers in the years following 1850, a restless desire for efficiency, and a propagandist attempt to show the world their usefulness, urged them to demand external examinations which would put an impartial hall-mark of learning on their productions. The schoolgirl's life became a progress

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from one examination to another, and, on the results achieved, the school, the teacher and the child were judged.

This system has to some extent fallen into disrepute. It is now the custom to postpone external examinations till the last years of school life and then to take a single examination such as London Matriculation, or the School Certificate of the Oxford and Cambridge Joint Board. This examination is directly useful as admitting the child to various callings ; and if in the VI form such an examination as this can be taken successfully, it means that the teaching throughout the lower part of the school is satisfactory.

In elementary schools the history is somewhat similar. A period of unnatural activity has been followed by a distaste for all external examinations, so that now the Board of Education, in its Code, definitely discourages the taking of them.

“ Except with the consent of the Inspector, the syllabus must not be modified with a view to the preparation of scholars for any examination. This consent will be given only if the Inspector is satisfied that the modified course of instruction fulfils the conditions laid down in the preceding paragraph for teaching extra subjects (i.e. that the teaching should be suitable and efficient and the subject likely to be useful), and that it is suitable in itself for the scholars concerned, irrespective of the requirements of the examination.”¹

But before this view was reached, the schools had suffered for many years from the Board’s own system of examinations.

By the Revised Code of 1862, annual examinations of individual children were an integral part of the system and on these examinations the grant to the school was paid. Thus the annual examination filled teachers and children with terror ; teachers, because the grant to the school depended on it, and their salary depended

¹ Code, 1912, Art. 5, 6.

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on the grant ; children, because months of anxious coaching, keeping in and caning culminated on that day.

We can approach the question of these examinations from two sides. To the genial inspector, cheered by handsome entertainment at the house of the local squire, it was quite an ordinary matter. Mr Sneyd Kynnersley, in his amusing book of reminiscences¹ describes examinations in 1871. The passage quoted shows the state of things in a little Welsh village school.

The Inspector came to the school and his duty was to examine all those children who had made 250 attendances.

"Our plan of campaign was delightfully simple. Most of the children were in the two lowest standards. These were supplied with slates, pencils and a reading book, and were drawn up in two long lines down the middle of the room. They stood back to back, to prevent copying, and did Dictation, and Arithmetic, sometimes dropping their slates, sometimes their pencils, sometimes their books, not infrequently all three, with a crash on the floor. When we had marked the results on the examination schedule, all these children were sent home, and the atmosphere was immensely improved. Then we proceeded to examine the rest, the aristocracy, who worked their sums on paper. As a rule if we began at 10 we finished about 11.45. If the master was a good fellow, and trustworthy, we looked over the few papers in Dictation and Arithmetic, marked the examination schedule, and showed him the whole result before we left. Then he calculated the 'percentage of passes', his grant and his resulting income ; and went to dinner with what appetite he might. . . ."

This examination was only in the three R's, but in 1875 Geography and History were included as normal grant-earning subjects. The Board's inspectors now conducted class examinations and the worried teacher

¹ H.M.I.

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did his best to prepare for the possible vagaries of that mysterious being, the examiner.

The whole business became a duel of wits between the teacher and the inspector. A teacher in the late 80's duly prepared her Standard V in "How Horatius kept the Bridge". Every word, every allusion, was explained and the explanations learnt by heart. The lines were analysed, the words parsed. She believed that the children's information must be proof against all inspectorial assaults. The great day came. "Tiber" and "Tarquin", "Etruscan" and "Ramnian", were safely passed, and the teacher breathed freely again as H.M.I. settled down to the calm waters of the simple middle stanzas. Then said he :

"Four hundred trumpets sounded a peal of warlike glee."

"I wonder what *glee* is?" The answer was correct. "What is a trumpet?" "A trumpet, sir, is a musical instrument in which sound is made by air passing through a tube." Correct again. "And now, I wonder what would make more noise than four hundred trumpets?" This was unforeseen! But surely the class could rise to the occasion. "A cannon," "A gun," "An explosion," etc., etc. All were rejected. What answer the Inspector wanted no one ever knew, for the apparent idiot of the class came to the rescue. He was the one person with his hand down. "Well, you!" growled the Inspector, pointing at him. The boy answered in a tone as disgruntled as the one the Inspector had used to him—a tone implying futile stupidity in the questioner, "Please, sir, *eight* hundred trumpets!"

It must be remembered that the information demanded was in no way suitable to the children who were required to know it, and teaching methods were far less effective than those in use to-day. The ever-ready publisher's hack rushed into this gap and provided *Guides to the Code Examinations*. By studying samples of these we

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can gain a glimpse, from another side, of the working of these examinations and see what knowledge was expected of the children and in approximately what form.

In 1888 there was published a little book, *The Teacher's Handbook to the Code Examinations*, edited by the author of *How to Pass Ninety Per Cent. and Earn Excellent*. The book contained a series of imaginary examinations suitable for Standard II and gave questions and the right answers. The preface explains :

" This selection of Questions is intended to be used by the teacher of Standard II during the last few weeks preceding the annual examination by H.M.I. It will also be found useful by the head teacher in the regular examinations with which he tests the progress of his scholars.

" The selection (which has been made from examinations in all parts of the country) does not profess to be *exhaustive*; it is, however, fairly representative of the *kind of knowledge* which will satisfy a reasonable examiner, and will be most *suggestive* to a painstaking teacher."

The book contains samples of examinations in various subjects.

In the beginning is English, which was grammar.

Oral. Nouns and verbs selected entirely from the poetry in the reading book.

1. "I see you." What do these three words make? [A sentence.] What words must you have to make a sentence? [A noun, and a verb.] Which is the noun? [This question did not upset the children. Their teacher had taught them a little about pronouns.]

2. What sort of a noun is "chair"? Why do you call it a common noun? [Because you call every chair a chair.]

3. "Down in a green and shady bed." Pick out the verbs. [There are no verbs.] Who can make a sentence

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with these words? [Sentence completed from reader.]

4. [Inspector jumped over book he placed on the floor.] What have I done? [Jumped.] Is what I did a verb? [No.] Why not? [Because a verb must be a word.] [Inspector wrote on the board "I jumped over the book."] Which is the verb? Why? [Because it tells you what you do.]

5. "I took a big jump." What is "jump" now? [A noun.] Why? Can all verbs be nouns? Tell me a verb that cannot be a noun. [See.]

8. You have told me something about nouns and verbs. Are there any other kinds of words? [Yes.] How many kinds have you heard about? [Eight.] Tell me their names if you know them. [Names given.]

Geography.

1. What is the earth made of? [Land and water.] Which is there most of? [Water.] How much more water than land? [Three times.]

2. What are openings into the land called? Show me some bays on this map. Some gulfs, some inlets.

3. What is a hill, a plain, a tableland? Show me one of each.

4. What is a river? [A stream of water running over the land.] Where does the water come from? [The clouds.] What besides rain falls from the clouds? [Snow and hail.]

5. What do you call the top of a mountain? [The summit or peak.] What is a crag? [A steep rock often found on mountains.]

6. Where do you measure hills from? [Sea-level.]

7. What is the most peculiar mountain? [A volcano.]

8. Why? What do they send out? [Fire, smoke, steam, stones, lava.]

9. What is the use of mountains? [They stop the rain clouds.]

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10. What is a spring? [A place where the water flows out of the ground.]

N.B.—Other information required :—technical terms, such as promontory, isthmus, watershed, river basin, zone; points of compass; names of chief rivers and mountain ranges in England and in some other countries; some products, as tea from China; size and shape of world.

As can be imagined teachers found great difficulty in making their classes of babies learn this unsuitable matter. They bullied the children and worried themselves, and about 1885 and 1886 the storm burst. The Government published a "Return of Cases of Over-pressure and Illness", and the National Union of Elementary Teachers brought out a fat pink pamphlet, in execrable print, which contained its correspondence with the Education Department, along with various letters and speeches referring to the state of things in England. The letters from the districts remind one very forcibly of some of the outbursts of indignation which adorn our daily press, and in order to show that the art of "writing to the papers" is not new in England, it may be well to quote one or two.

"Bradford."

"Miss ——, about 28 years of age, was trained at Liverpool, and, up to the last Government Examination, was Head Mistress of St Peter's School, Bradford. School was about 120, mixed and half-timers. She taught a class herself, also Sewing, Singing, etc. The school passed over 90 per cent., and was classed excellent for the merit grant. The school, I have been told, is hard to work. The worry had such an effect upon Miss —— that, for some time before the examination, she could neither eat nor sleep, but lived on excitement. When the examination was over, her mind gave way, and she is at present an inmate of the Lunatic Asylum at Sheffield. There seems to be very little hope of her recovery."

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"Northampton.

"In my own school, I work harder every year, and obtain poorer results."

"Carlisle.

"Two little children have died of low fever or something of that kind, within the last few months, and nearly their last words were concerning their lessons. 'I cannot do my sums, father,' said a little boy of seven, the last evening of his life; and the other talked of his lessons all one night a little before his death. . . ."

When the National Union, fortified by such letters wrote to the Education Department, protesting against the whole system of payment by results and in particular against Mr Mundella's Code of 1882, they were not taken too seriously.

"You urge", replied the Department, "that there is over-pressure. We admit that it exists in isolated cases, we deny that it is or should be general. You blame the Code for asking for attainments that are beyond the power of children who attend irregularly. Irregular attendance is largely the fault of bad teaching. The requirements of the Code are fixed with regard not even to the average child but rather to the stupid child. With decent teaching they are well within the reach of all. It is teachers who create over-pressure by bad forms of instruction, by creating an atmosphere of excitement, and by keeping children in after school hours to do extra work."

The teachers protested in reply that it was the system which forced them to practices which they would never naturally adopt.

History has, as often, shown both sides to be right. The Education Department dropped its payment by results some ten years later, and left the teachers far greater freedom; teaching and conditions have also improved. On the other hand, with this improvement

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in teaching, attendance has risen from 70 per cent. to 90 per cent. and teachers now manage "three reading books, with composition in Standard V" without giving their children brain fever or "keeping them in and beating them", as was apparently necessary in the days of more inefficient methods.

Though the external examination has gone from the elementary schools the internal examination remains as strongly entrenched as ever, and is an integral part of the school teaching and serves many purposes.

These examinations are a test of the children and of the teacher. They help the school to see which children have best understood the instruction that has been given them; they also help the Head Master to see which classes show most signs of progress and to detect a class that has apparently been inefficiently taught. In addition, examinations show the progress of the different subjects in the school, and indicate the position of each class in respect to those above and below it. These fundamental aims also affect other branches of school organization, and in particular it is generally on the results of the examinations that children are promoted from one class to another, or chosen to receive higher types of education.

At present a single type of examination is made to serve all these purposes, but it is probable that rather different examinations would be more effective for the different purposes. However, before we discuss these other types, there are certain questions connected with the normal type of school examination that deserve discussion.

I. Who should examine? It is the custom at present in most elementary schools, for the Head Teacher to examine the whole school himself twice or even three times a year. This is a lengthy and tedious process, and, though it is necessary that the Head Master should be acquainted with the work of the school, it is not in the least necessary that he should mark all the worked

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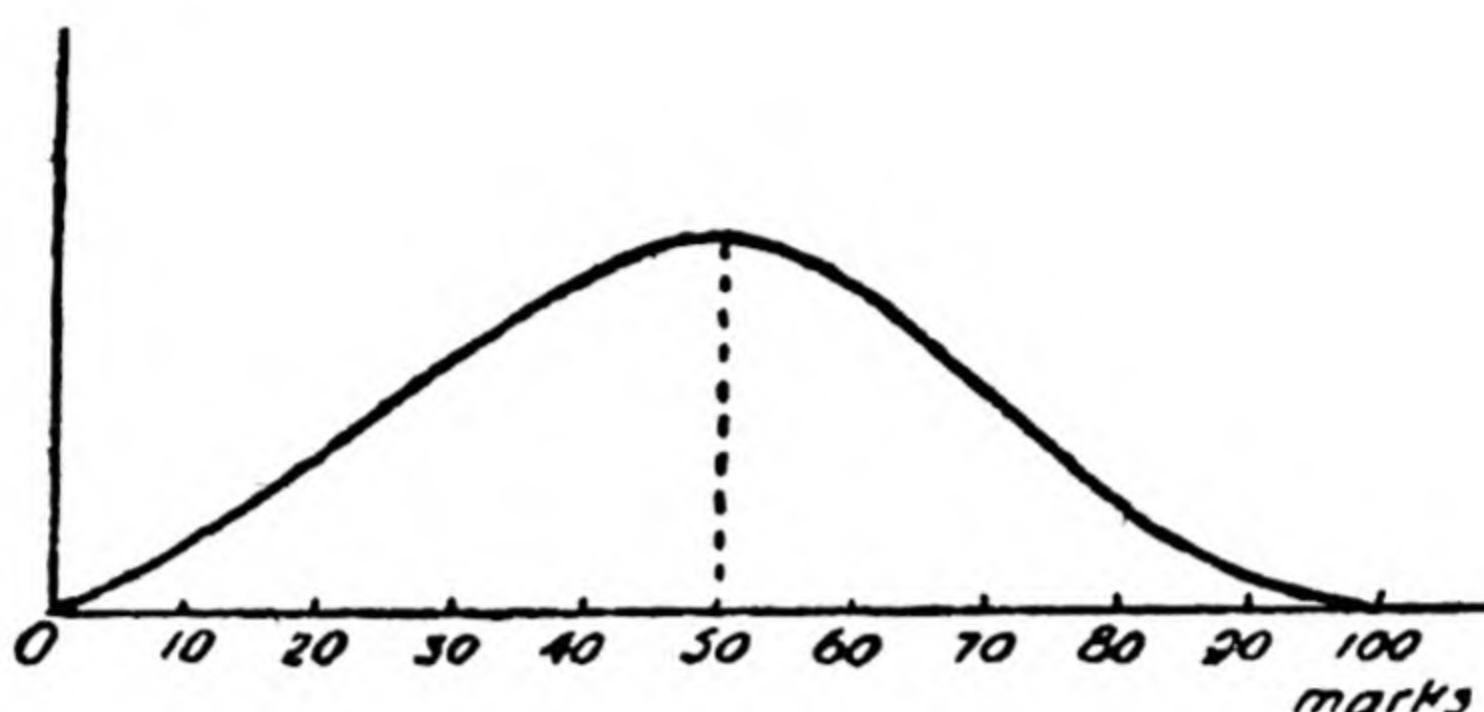
papers. In fact, if the tone and feeling of the school is good, he would probably get a far better impression of the work done by taking in the marks and examining a few sample papers, than by looking at them all. This is the custom in secondary schools, where the Head Master has generally not the requisite knowledge to examine in all branches ; and the good secondary school master probably has quite as just an appreciation of the progress of his school as has the teacher in an elementary school. In fact, the correction of examination papers in all subjects from some 500 children is so wearisome and bemusing a task that the Head Teacher who conscientiously performed it would be too exhausted and muddled to form a just opinion on anything for at least a fortnight afterwards. Moreover, nothing is forgotten so quickly as the contents of examination papers, and, unless copious notes are kept, one must, at the end, look back at a few to refresh one's memory. One might as well have acted on the sample method from the beginning.

The reason that Heads like to set and correct all the papers is probably twofold ; they feel that they are "doing their duty", and they like to think that they are preventing any deceit on the part of the teachers. "It would be so easy", think they, "for little Miss Jones, who I *know* is a bad teacher, to coach her class and to mark on too low a standard, and if I examine I know that the work is fairly done." Such an attitude of mind is a disgrace to any Head. If he feels like that about Miss Jones, there is something wrong with his management of the school. No normal person wishes to falsify her class's marks unless she has been bullied and frightened by someone in authority. In the second place there are many ways of checking examination results without correcting all the papers oneself.

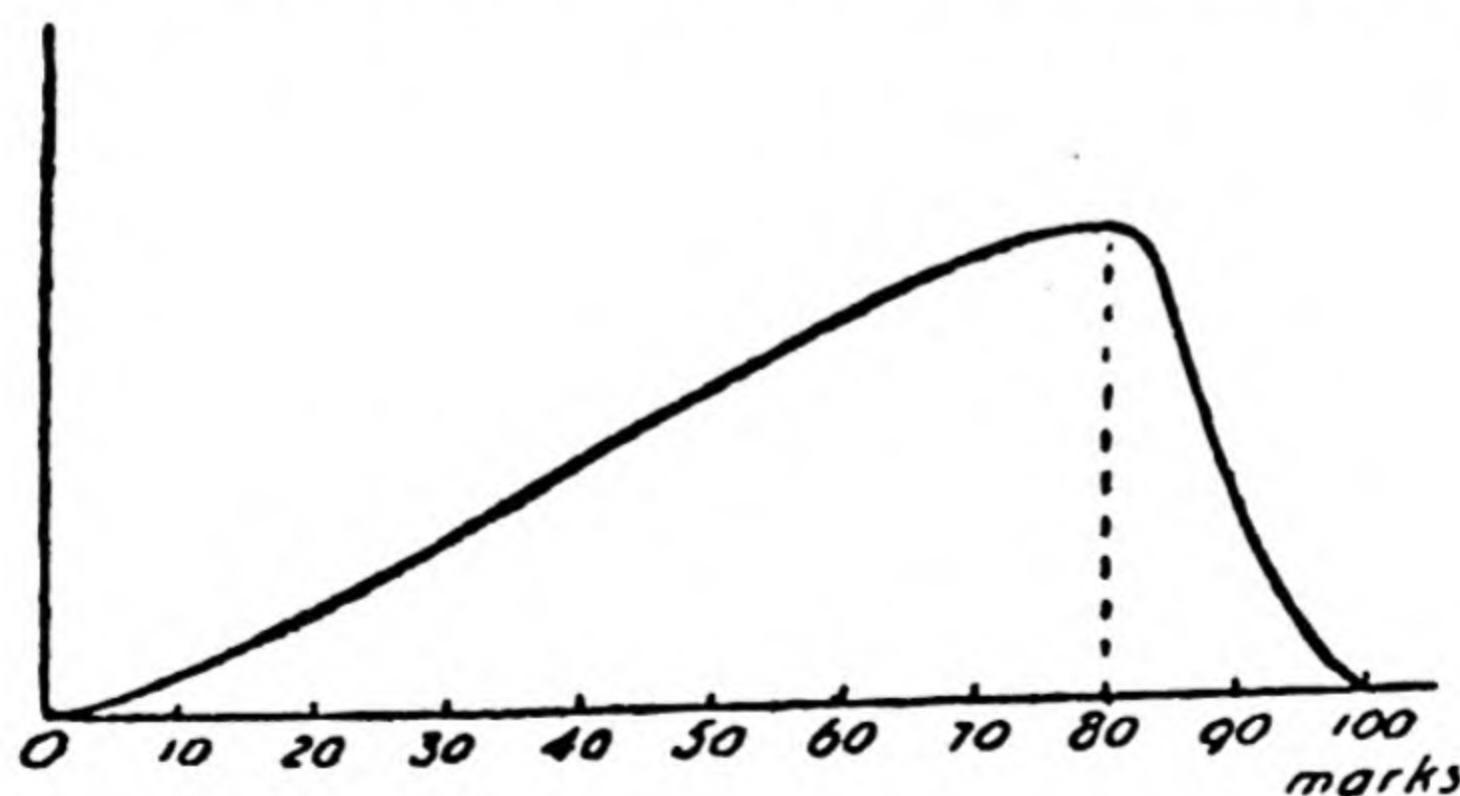
It is a simple matter to look at one or two papers—those at the top and bottom of the list do best—and decide from these the standard of the whole set ; it is also possible to judge by the distribution of the marks

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whether the paper has been a fair test. If we take any characteristic which is distributed by chance, such as height or weight, we shall find that the greatest number of cases occur in the middle of the range of variation and that a frequency curve has an approximately regular shape, e.g.



Now in an examination the distribution of marks ought to be roughly similar, but because the matter has been taught and the distribution does not depend on chance, it is no uncommon thing to get the mode moved slightly from the middle point towards the upper end of the scale. But this movement ought not to be very great in a well-conducted examination and curves which differ markedly from the norm should be mistrusted, e.g.



Such a curve as this shows that the class has been coached, or that the paper set or the marking was too easy ; while a curve with the greatest number of cases near the lower end of the scale shows an opposite defect, or something wrong with the attitude of the class. If

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class teachers plotted the curve of their examination results it would be a useful guide to themselves and the Head Teacher.

There is a third means by which the Head Teacher can save himself the task of correcting the papers of the whole school, and also save the class teachers from any temptation to "doctor" their results; that is for a teacher to examine a class not his own. It is best if he examine the class immediately below the one he takes, and then he has some idea of the material which will shortly be passed on to him. He naturally sets his paper after consultation with the actual teacher, but he also sets it with an eye to the work which he means to teach next year. He can thus do much to bring about a co-ordination of the syllabus between the different classes. The only real difficulty is a psychological one. The criticism that is fairly easy to bear from a Head, is intolerable when uttered by a colleague, and the very frequent "But, my dear fellow, they know *nothing* about it," may be very galling. It is noticeable that this custom of inter-class examinations is commoner in boys' than in girls' schools.

II. How often should examinations be held? In some schools examinations are held every term with a summer test on the whole year's work, in others the examinations are half-yearly. The method preferred depends almost entirely on other details of school organization. If the syllabus is arranged for a year, then there should be an annual examination in the whole work of the year, with subsidiary examinations at the end of one or more terms. If the syllabus runs for six months and promotions are made at the end of that period, it is natural that there should be two examinations in the year, each one on the work of the past six months.

The normal type of examination consists of a number of questions (four or five for examinees of fifteen and upwards), the answers to which must be written in essay

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form. The length of the essay required depends on the age of the children, and in certain subjects at certain ages "notes" are asked for. This type of examination has been subjected to much criticism, and some writers condemn it completely; but as it is still in very general use, and, as it has a technique of its own, it is worth discussing.

Firstly the questions should be so arranged and worded that they cover the maximum amount of the work that has been taught, and do not admit of the pupil repeating himself. This requirement is not easy, and even the most experienced examiners err. One year the Oxford examiners for Lit: Hum: set approximately the same question in three successive papers.

Secondly, in a paper set to children, and intended to be done in its entirety, the questions should be clearly graded, the easiest being put first. Too often the inexperienced teacher puts a difficult question early in the paper, and all the less able children stick at it, never winning through to the easier ones beyond. This grading ensures another important thing, that the paper should distinguish between the average and the really good. A paper that is too short or too easy gives the best no chance of outstripping the solid workers of no special attainments. On the other hand it is unfair to set a paper which only the really clever child can do, and at least half the paper should be on matter with which everyone ought to be familiar.

A good examination paper does more than test knowledge, it helps the pupils to organize their knowledge; therefore, the questions should, as far as possible, concern principles, not mere details of the subjects studied; they should embrace as wide a field as possible, and require a certain amount of thought in the combination of different elements of knowledge. They should also involve the application of knowledge, rather than the mere reproduction of matter learnt in the lesson or from a text-book.

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Before we consider alternative forms to this examination, we ought to be clear what examinations are meant to test: they are used so widely and for such strange purposes that people are apt to become confused. The Civil Service needs young men to be governors of India, to control unruly native tribes, to decide questions of high finance, to arrange educational affairs, and so on. The young men are chosen on a competitive examination which need not include any subjects directly connected with their future work. The aim of the examiners is simply to see which men possess intellectual ability, as evinced by their accumulation of knowledge and by their power of expressing what they know, and who thus will be likely to learn their duties easily and do them well. The examination is indirectly a test of steadiness of character and of industry, since a man who does not possess these qualities is not likely to know as much as a man who has them. The examination also acts, roughly, as a test of "nerve", and many a neurotic man collapses before or during an examination that he was perfectly able to do well, as far as his intellectual powers were concerned. Apart from this, the examination does not test that quality which is called vaguely "personality" or "power of command", and that is why so many written examinations are supplemented by an interview.

Among school children again an examination may be intended to show the knowledge actually acquired, or it may be diagnostic and intended to show native ability and the powers the child has for the future acquisition of knowledge. As in the case of the Civil Service Examinations, these two aims are often connected, and the same examination serves both, since the child who has learnt most in the past will probably also learn most in the future. An examination cannot under ordinary conditions do much to reveal high powers of originality—but then it is not meant to, any more than it is designed to show "personality". Originality must be tested

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by a different method, and examinations should not be attacked on the ground that they do not reveal it. Neither is it just to condemn examinations because the abnormally nervous child does them badly. Steadiness is one of the qualities that examinations are designed to test, and every serious examination is preceded by so many rehearsals that nervousness is an inadmissible luxury to be paid for accordingly.

If, then, examinations are not to be abolished, it is important to decide what is the best form for them to take. The ordinary type of examination is accused by Mr Ballard¹ of being inefficient for its own particular purpose, which is to test the knowledge that the children have acquired, for the reason that the whole examination is essentially unreliable. He argues that the essay, which is its basis, is one of the hardest things to assess, and one in which the individual's performance varies most from one occasion to another. Further, very few examiners would mark the same essay in the same way. This matter has frequently been made the subject of experiment and the results are all essentially the same. Ballard, in his experiment, sent round seven schoolboy essays first to an independent external examiner, then to thirteen teachers of experience. The outside examiner marked the essays, on a maximum of 100, giving them marks ranging from 90 to 40. The others simply arranged them in order of merit. This is the result : "One of the essays occupied each of seven possible positions, two of them occupied six positions, and each of the remaining four occupied five positions. No less than five-sevenths of the scale was covered by the essays upon which the agreement was closest." This variability is not, however, confined to essays : a Geometry paper submitted to 115 examiners got marks varying from 28 to 92 per cent. As History and Geography papers inevitably largely take the form of essays an exact valuation of work in these subjects is equally impossible.

¹ *The New Examiner.*

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The sting of this criticism is the claim that judgments on essays are so variable that the essay is really useless as a means of assessing individual ability.

Yet, although this variability of examiner's assessments can apparently be proved quite easily by experiment, it is no unusual thing for two colleagues to read the same papers in English Literature, for example, and mark the scripts to within two or three points of each other ; and when an external examiner looks over papers that a lecturer has marked he usually agrees with the result. The fact seems to be that it is always possible to find examiners who will disagree, just as it is possible to find those that will agree, because certain bodies of people have well-defined prejudices according to which they mark. It is probably easier to find divergencies of opinion among school teachers than among University examiners, and it is highly probable that a school teacher and a University lecturer would judge the same paper differently. One can mark a child's essay for length, neatness, spelling, punctuation, copiousness or justness of vocabulary, promise or performance or matter. The school standard tends to lay stress on the mechanical side of composition, a psychologist is apt to judge by the number of words employed, irrespective of the correctness of their use. One accustomed to more advanced work looks to the promise of the child, and the connection of ideas. If it is understood between teachers, examiners, and pupils what is required, the assessment, even of the essay, need not be too uncertain.

Further, the alleged variability in an examinee's performance in the essay can easily be exaggerated. Every student knows that he hands in essays of very different merit from one week to another, but he also knows the cause. It is not his power to write that has changed, but his willingness to take the necessary trouble. Under examination conditions, unless the candidate has very bad luck and strikes a subject which

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proves particularly intractable, his performance is far steadier than from week to week.

There is, however, a more important point. The present type of examination always tests at least two things: the examinee's knowledge of the subject matter, and his power of expressing himself in writing. These two things need not vary concurrently. It is arguable that a test in History should be concerned only with History, and poor powers of expression should not diminish the chance of obtaining credit for knowledge. This is perhaps true when children are being examined, and when half the purpose of the examination is to test whether the teacher has conveyed the necessary information.

As a means of meeting these criticisms, new kinds of examinations have grown up. They take their origin from the Intelligence Test but have been adapted to school subjects. They admit of objective marking, are declared to be far less affected by variability in the candidate or marker, to show a closer relation with other ways of estimating ability than ordinary examinations do, and to test the subject in hand without the complication of requiring skill in writing English. They have also been tried out on large numbers of children, so that it is possible to compare the performance of a child or group of children with an outside standard.

The following are samples from tests given in Mr Ballard's book, *The New Examiner*. The whole tests are not given, but enough to show the kind of matter and method used.

SILENT READING (B)

15 minutes.

10 minutes for adults.

Wherever a number appears there is one word and only one word missing. That word has to be written on your answer paper opposite its proper number.

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Joan has two dolls, one with black hair and the other with brown. She liked the doll whose hair was brown, but did not like the doll whose hair was (1) . . .

A man who was invited to dinner arrived at eight o'clock and found he was an hour late. He ought to have arrived at (4) . . .

An Englishman and a Frenchman quarrelled, and agreed to fight a duel in a dark room. The Englishman, not willing to have murder on his conscience, groped his way to the fireplace, fired up the (48) and brought down the (49). In the French version of the story it is the (50) who is made to hide up the chimney.

ENGLISH (COMPREHENSION)

1 hour.

- A. Choose from among the four words in brackets the word that means the opposite of the first word.

Sample.—Dry (cold, windy, wet, hard). Answer : *wet*.

- i. Cautious (guarded, adverse, harsh, rash).
10. Cunning (skilful, truthful, pleasant, artless).

- B. When two words mean almost the same write S for same. When two words mean almost the opposite write O for opposite. When you do not know which they are, write N.K. for not known.

Sample.—Quick—rapid. Answer S.

- ii. Before—after.
20. Argument—compact.

- C. From among the words or stops in brackets select the words or stops that make the best sense. The number of the question is put before the bracketed words.

Sample.—She invited me 15 (for, to, after) tea.
Answer 15. to.

What a pity 16 (. ? !). Answer 16!
I do not wish 21 (of, by, for) more money.

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The 69 (shouting, cackling, cawing) of the Rooks in February shows that the 70 (time, year, incident) is coming when their 71 (houses, nests, lairs) will be 72 (occupied, re-occupied, destroyed) 73 (, ; .).

ARITHMETICAL REASONING

1 hour.

Work the following sums in your head :

(1) Joan is 18 years old. If Sarah were 5 years older she would be as old as Joan. How old is Sarah ?

(25) Find the cost of 9d. worth of eggs at 7 for 6d.

(50) I entered a shop at 5 p.m. and stayed till 5.30 p.m. I bought two ties at 2s. 6d. each, and two handkerchiefs at 3s. 6d. each. What change did I get from £1 ?

(75) A man works a day, then rests a day, then works a day, then rests a day, and so on. For each day he works he earns 15s. How much will he earn from Monday morning to Friday night ?

(100) The first even number is 2, the second is 4, and so on. What is the hundredth even number ?

HISTORY

England since the accession of Henry VII

A. In each of the following sentences choose from among the names in brackets the one that will make this statement true.

(13) America was discovered by (Drake, Columbus, Cook, Raleigh).

(20) At the Crimean War the nursing was organized by (Jane Austen, Florence Nightingale, Charlotte Brontë, Elizabeth Fry).

B. Supply the missing word or words where the number of the question appears in the following paragraphs.

England first became Protestant in the reign of (21) and finally in the reign of (22), but the separation from Rome took place in the reign of (23).

After the Great War the League of (49) was formed for the purpose of preventing (50).

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GEOGRAPHY

Some of the following statements are true and some are false. Read each carefully. If you think it is true put Yes in your question paper ; if you think it is false put No ; if you don't know put a dash —.

(56) Our imports are mainly food and raw materials for manufacture.

(76) Generally speaking the population is most scanty in the coalfields.

(100) London began to grow round Blackfriars Bridge.

These tests are interesting and should be used at least occasionally in any school, but it must be remembered that all examinations tend to fix the syllabus. Mr Ballard has noted this fact and claims that if these tests do fix the syllabus, it is all to the good as they contain the necessary bones of knowledge, which must in teaching be made to live. It is far from certain that this will be so. If success is going to depend on knowing names and dates, History may well slip back into teaching nothing but names and dates, and the unimaginative teacher may find his methods apparently justified.

One very important use to which examinations are put is the diagnostic. In England there is a competitive examination given to children at about eleven years of age to decide which are of sufficient intellectual capacity to benefit by a secondary school education.

The L.C.C. in its pamphlet on the 1926 examinations states that "the sole purpose of the Junior County Examinations is to apply a measuring rod to gauge the abilities of the more capable portion of the children of London at a time when they are aged 10+ in a group of which the eldest is but six months older than the youngest.

"Some of the children within this age-group have not reached Standard IV, and these are not subjected to any test : they form a minority.

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"The majority are tested first by the Preliminary Examination on the results of which roughly the more capable third are selected to sit for the Final Examination ; the Preliminary Examination is taken at 10 years 3 months ; and the Final Examination some four months later. Neither of the examinations is therefore a test of the ability of the average London child of 10 years.

"All children who sit at the Final Examination are certainly among the top 25 per cent. in ability. The Final Examination has but one aim, to arrange these capable children in an order of merit. There is no competition between boys and girls. It will suffice for a moment to consider the boys, who number roughly 4,500 at each examination.

"Of these 4,500 the top 20 are arranged in order of merit for consideration for Christ's Hospital and Bancroft Scholarships. Each of these 20 scores about 90 per cent. of the possible marks, and the examination must be arranged to secure definite objective evidence of a difference in score between No. 20 and the next boy below him on the list. This circumstance alone indicates that the examination must be a severe test so nicely adjusted to the ability of the children that the child of exceptional ability has the opportunity to score very high marks.

"The main purpose of the examination is to select the top 450 from the 4,500 for the Junior County Scholarships awarded by the Council. This number, 450, is but 10 per cent. of the candidates at the Final Examination and less than 3 per cent. of the children of London within the eligible age-group.

"The last of these boys, No. 450 on the list, usually scores about 75 per cent. of the marks.

"A subsidiary purpose of the examination is to classify the remaining candidates, some 4,000 odd, in large groups, each of approximately equally able children. From these groups the children proceed to central schools, from the more able group first, and so on.

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"The examination must, therefore, depend upon the ability of the children who are candidates ; it aims at discovering their ability and is, in a large degree, a test of their inherent capacity, of the stock whence they come.

"Some London schools provide a steady stream of eight scholars per examination, others provide a regular flow from one to seven on the average, yet others yield an occasional scholar as sporadic specimens of unusual ability in these schools ; hence the examination can bear little relation to the average school curriculum, it is no measure of what the average London child of 10+ should know, or should be able to do ; it is not primarily a test of attainment, it merely grades the candidates presented by the schools."

The papers set in the final examination are :

- | | |
|----------------|--------------------------|
| I. Arithmetic. | A. Mechanical questions. |
| | B. Problems. |
| II. English. | A. Essay. |
| | B. Linguistic. |

These are sample papers :

FINAL EXAMINATION FOR JUNIOR COUNTY SCHOLARSHIPS.

October 30th, 1925.

Alternative Examination.

ARITHMETIC. (PAPER A.)

Time 9.15-9.50 a.m.

Answer all the questions.

Arrange your working so as to show clearly how you get the answer.

1. From $\frac{1}{5}$ of 1605 take $\frac{1}{7}$ of 3553.
2. Multiply £3 7s. 8½d. by 38.
3. Find the values in lowest terms of :
 - (a) $\frac{2}{3} - \frac{5}{6}$.
 - (b) $\frac{4}{5} \times \frac{3}{10} \times \frac{2}{3}$.
 - (c)
$$\begin{array}{r} 6s. 8d. \\ \hline 14s. 2d. \end{array}$$
4. Find the values of :
 - (a) $40 \times 0.75 \times 1.1$.
 - (b) $30.5 \div 12.5$.
 - (c) 3.24×6.25 (correct to the nearest whole number).

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5. Find the values of :

(a) $3\frac{1}{3}\%$ of £66.

(b) 16 per cent. of $7\frac{1}{2}$ lb. (answer in ounces).

6. Find the costs of :

(a) 7 oz. of tea at 2s. a lb.

(b) $11\frac{1}{2}$ oz. of bacon at 1s. 4d. a lb.

(c) $2\frac{1}{2}$ lb. of butter at 2s. 2d. a lb.

(d) 1 ft. 9 in. of piping at 3s. 4d. a foot.

(e) 11 sacks of meal at 17s. 4d. a sack.

(f) 5 dozen eggs at 2s. 9 $\frac{1}{2}$ d. a score.

Total cost is not required.

ARITHMETIC. (PAPER B.)

Time 11.0-11.40 a.m.

Answer all the questions.

Arrange your working so as to show clearly how you get the answer.

1. If Mary cuts out 5 pinafores at a time in 15 minutes, and takes 12 minutes to finish off each pinafore on the sewing machine, how many pinafores can Mary make in $2\frac{1}{2}$ hours?

2. Each guest at a child's Christmas party was given a bag. The bags for the younger children, who formed two-thirds of the guests, contained 2 penny cakes, a $\frac{1}{4}$ d. orange and a penny toy ; those for the older children held a better toy which cost 1 $\frac{1}{2}$ d. and an extra penny cake. How much would it cost for enough bags for 240 guests?

3. A boy bought 12 chickens at a shilling each. One died. Three were cockerels, which he fattened and sold for 8 shillings each. The rest each laid 200 eggs, and after he had had them 80 weeks, he sold them at 6 shillings each. He received for his eggs 1 $\frac{1}{2}$ d. each. The food cost 2 shillings a week.

(a) How much did he spend in all?

(b) How much did he receive from his sales?

(c) What total profit did he make per week?

4. Wickets cost 6d. each ; bails 1d. each ; bats 2s. 6d. each ; balls 1s. each. Cricket sets with 6 wickets, 2 bails, 2 bats and 1 ball are sold for 12s. 6d. a set. How much is gained by selling a dozen sets?

ENGLISH. (PAPER A.)

Time 10.0-10.40 a.m.

Write on ONE of the following :

EITHER

1. Horses and their uses.

OR

2. A policeman on duty : his story.

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ENGLISH. (PAPER B.)

Time 11.50 a.m.-12.25 p.m.

1. *Read the following passage :*

Farther down, on the slope of the hill, was the well with its moss-grown

Bucket, fastened with iron, and near it a trough for the horses. Shielding the house from storms, on the north, were the barns and the farmyard.

There stood the broad-wheeled wains, and the antique ploughs and the harrows ;

There were the folds for the sheep ; and there, in his feathered seraglio,

Strutted the lordly turkey, and crowed the cock.

Answer the following questions :

- (a) Where was the trough and why was it there ?
- (b) If you stood in front of the barn and looked away from the house would you be looking to the north, south, east or west ?
- (c) Quote the names of two things in the farmyard.
- (d) Express in your own words " strutted the lordly turkey ".

2. *Read the following passage :*

This powerful ruler governed a wide realm ; he controlled his turbulent nobles with a firm hand and compelled them to obey his behests. His death was the signal for many insurrections.

Write down, one on a line, the words underlined and opposite each of these words, write a word or phrase which has a similar meaning. For example :

powerful—mighty.

3. *Read the following phrases :*

- (a) at a moment's notice.
- (b) at no great distance from.
- (c) improvident.
- (d) in great haste.
- (e) in dumb show.
- (f) in easy fashion.
- (g) unaided.

For each there is a phrase beginning with one of the words *with*, *within* or *without*, which has almost exactly the same meaning.

Choose five of the phrases and write each in your answer book with its equivalent in this manner :

unafraid
without fear

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4. *Read these sentences :*

- (a) Grasp the — firmly.
— it gently.

The word omitted is the same word—handle.

Ten pairs of sentences follow, write in your answer book the missing word, thus (a) handle.

- (b) My — won't go.
— me do it.
- (c) That's a band —
— up, please.
- (d) A — is as good as a mile.
Take care not to — it.
- (e) James — him no ill-will.
Oil gushed in a fountain from the —
- (f) — yourselves in fine raiment.
Sailors sleep on the lower —
- (g) — comes to him who waits.
The play was a great —
- (h) The signal ran “ — the enemy ”.
I will — you after a month's trial.
- (i) Slow trains take the — line
I can climb the tree with the help of this —
- (k) Trains travel along the — road.
— those clothes carefully.
- (l) He was — to the last.
— birds are preserved on the moors.

As regards the papers the pamphlet issued by the L.C.C. shows what type of answers are expected to the B. Arithmetic paper and also comments on the marking of the essay, as follows :—

“ PAPER A. ESSAY ”

“ The marking of Essays is never an easy task, it calls for qualities of nice discrimination and delicate appreciation. The keen competition for Junior County Scholarships makes it of prime importance to assess minute differences of merit, and it is a matter of some satisfaction to record that the system of marking is working well.

“ The essays of all candidates ‘ in the running ’ for a scholarship are marked independently by two examiners,

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and the more difficult essays are marked again independently by a third examiner. The other three papers in the examination test ability by numerous specific details for each of which the score is but two or three marks ; these details are assessed in accordance with schedules designed so that the best children score nearly full marks and the least able children score merely a mark or two. The essay is marked by a scheme which aims at securing a similar spread of marks. Three examiners share the first marking of essays and the scheme of marking tries to secure that all three give the same mark for essays of average merit and use the same scale of marks for the same degree of divergence from the average. The essay, therefore, becomes a test of general ability in contrast with the other tests of specific ability.

"The marks for essays at the November examination have been very carefully analysed, and it is obvious that these scholarship essays can be marked with a high degree of consistency by a team of examiners, provided the members of the team are agreed upon the various points for which marks are to be credited.

"A further analysis of the marks for the November essays confirms a conclusion first reached two years ago, that the essay marks bear a closer relation to the total marks for all the candidate's work than the marks for either Arithmetic paper, for the two Arithmetic papers together, or for English Paper B. It would appear, therefore, that the essay mark exerts a steady influence upon the examination somewhat in the fashion of the fly-wheel of an engine. This circumstance suggests that no pains should be spared to retain the high standard of efficiency attained in marking the essays, and, also, to preserve the general character which is a feature of the essay as a test of ability. This is probably sufficient justification of the essay as a device in examination."

There are many, however, who attack the examination from another standpoint. Examinations admittedly

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determine teaching ; to what kind of teaching will English Paper B tend ? Will it not have the same effect as the History papers quoted above and lead the unimaginative teacher to think he is doing his duty if he drills his children of scholarship age in lists of homonyms or similes ? Again publishers' hacks have been busy, and there are now on the market, and widely used in schools, all kinds of books for use in formal English, which give information and practice for the kind of question set in the L.C.C. scholarship examinations. The use of such books is not to be wholly condemned. Definite teaching and drill in certain forms of English are probably necessary and justifiable ; but three lessons a week in "Formal English", based on chapters from —'s *Intelligent Reader*, which chapters are only a series of possible scholarship papers, is an abuse not to be tolerated.

Not only is such teaching wasteful in that its ultimate results are poor, but even for purposes of the examination it is bad, since a knowledge of English words and the power to manipulate them is due to intelligent conversation and wide reading rather than to the learning of lists.

It is arguable that any other type of paper would have a far more cramping effect on teaching than even Paper B. To prescribe certain books on literature would be fatal, and lead to cramming.

Increasingly in America, and to a certain extent in England, another type of test has been used to diagnose ability. This is called the Intelligence Test, and is intended to show what a person knows, irrespective of any specific teaching. There are certain things which any normal person living in the world is almost bound to learn, and the Intelligence Test, at least in theory, confines itself to these pieces of almost universal information. In actual practice it cannot help bringing in simple Arithmetic and linguistic tests in which the candidate is greatly aided by teaching. However, as

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education is now so nearly universal, failure to have mastered such knowledge is almost always the indication of some kind of mental deficiency. With younger children and people definitely illiterate, the case is different, and special tests have been devised which obviate the necessity for reading and writing. The following are samples from one of the best known Intelligence Tests, the Otis, published in England by Harrap & Co..

The Primary Examination intended for young children begins as follows, and its nature can be seen from a few of the instructions for the first test and a page of the test itself.

TEST I. Following Directions

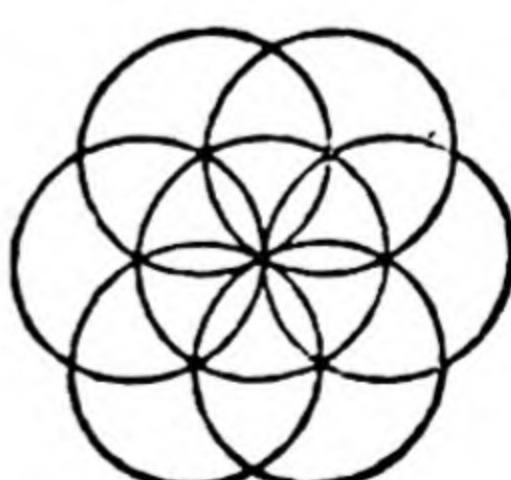
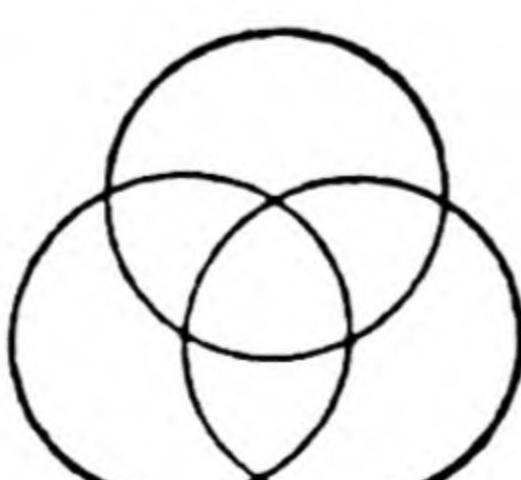
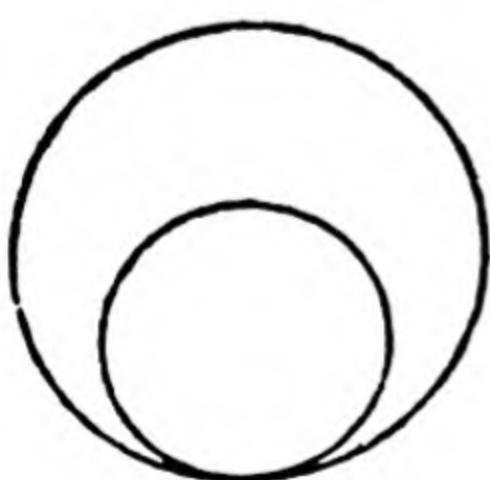
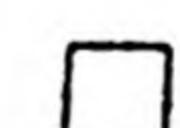
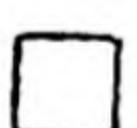
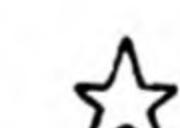
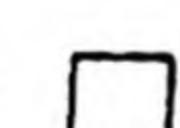
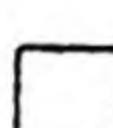
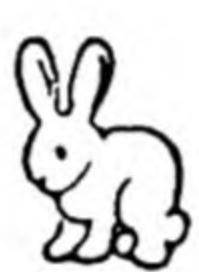
"Here you see pictures of many things. I am going to tell you something to do with your pencils on this page, and I want to see if you can do exactly what I say. Listen carefully while I tell you what to do, and then do it as quickly as you can. Notice the pictures at the top of the page.

- (1) "Now take your pencils and put a tail on the kitty that has no tail." (Pause 5 seconds.)
"Remember not to look round. That isn't fair."
- (2) "Now look at the little man in the upper right-hand corner and draw a line for him to stand on." (Pause 5 seconds.)
- (3) "Now look at the next row of pictures and draw a circle round the doll." (Pause 5 seconds.)
- (4) "Next find the picture of something that can run, and draw a line under it." (Pause 5 seconds.)
- (5) "Next find the picture that is between the doll and the candle and make a little cross under it." (Pause 5 seconds.)

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(6) "Next find the picture of something that gives light and can be picked up. Make a round dot under it." (Pause 5 seconds.)
And so on.

PLATE I



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The following are the examples from the Advanced Examination, intended for those who can read and write easily.

TEST I

Following directions

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Sample problem : Write the fifth letter of the alphabet.....E.

1. Do you understand that each letter is to be a capital made like printing and put in the parenthesis after the problem ? If so, write C in the parenthesis.... () 1.
2. Will you remember not to ask any question during the examination ? If so, write Q..... () 2.
3. Will you remember not to look toward the paper of any other pupil during the examination ? If so, write L () 3.
4. Will you remember not to turn over your booklet or any page of it at any time unless you are told to ? If so, write B ; if not, write N..... () 4.
5. Write the letter O..... () 5.
6. Write the eighth letter of the alphabet..... () 6.
7. Write the same letter that you were told to write in the fifth problem..... () 7.
8. Write the letter which follows the third letter of the alphabet () 8.

TEST III

DISARRANGED SENTENCES

Samples	{ men money for work.....	(true	false)
	uphill rivers flow all	(true	false)
	ocean waves the has	(true	false)

Directions.—The words on each line below make one sentence if put in order. If the sentence the words would make is *true*, underline the word *true* at the side of the page. If the sentence they would make is *false*, underline the word *false*.
Begin here :

1. eat grass cows (true false) 1.
2. sail ocean ships the on..... (true false) 2.
3. sun morning the the in sets (true false) 3.
4. trees birds nests the in build..... (true false) 4.
5. mountains live the in whales..... (true false) 5.
23. mile a a a travel snail in can minute..... (true false) 23.
24. motor car pocket man his keeps a his in.. (true false) 24.
25. vote persons twenty-one cannot under.... (true false) 25.

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This test gives its results in mental years. That is to say, it is arranged so that the average child of 13 years scores 100 marks, the average child of 12, 88, and so on. When the papers have been marked, it is possible from the table to find what age-group a child falls into. This may not be his chronological age. If he is a clever child it will be higher, if he is stupid, lower. When the mental age has been found it is divided by the chronological age, and the result multiplied by 100. This calculation gives the Intelligence Quotient, e.g. John, aged 10.6, has a mental age of 12.8. His I.Q. is $\frac{12.8}{10.6} \times \frac{100}{1} = 120$. This is a fairly high I.Q., a child of exactly average ability would have an I.Q. of 100, while another child, whose mental age was 9 while his chronological age was 10, would have an I.Q. of 90.

It is the possibility of thus calculating an I.Q. that gives these tests their importance, and renders irregular attempts and unstandardized tests not only useless but misleading. A test such as the Otis has been arranged with great care and tested on thousands of persons. It gives a standard by which a teacher can measure the powers of any pupil, be he bad or good. The highest I.Q. on record was scored by a little American girl, who had an I.Q. of 214.¹ A teacher is fully justified in calling attention to any child with a noticeably high or low I.Q., and the average score of a class may even be pleaded in extenuation of a teacher's failure to teach them anything.

Increasingly of recent years an examination of this type of the Intelligence Test has been added to the papers in English and Arithmetic set in the free place examinations. Its necessity has become clear through investigations conducted in various areas into the working of the examination. It has been realized that the performance of any one child on any one day in a very narrow field

¹ It is not stated what test was used. In an English school, using the Otis test, the highest I.Q. was 205, the average I.Q. for two classes were 164 and 168. The children were of high social standing and clever.

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of his activities may be a most unreliable indication of what he can do. A child may not be well, he may be in one of those recurrent periods of quiescence when he seems to be resting between periods of great mental as well as physical growth ; he may be worried or upset by strange surroundings.

A much better guide to his actual capacities would be a knowledge of what he has done year in and year out, or term in and term out during his school career. Then, his absence through illness, his periods of mental ups and downs, his rate of mental growth, would all be taken into account.

The way to obtain this information would, of course, be to have reliable records of each child's school career ; but as yet, no satisfactory form of record, which is sufficiently objective to be reliable, and sufficiently detailed to give a true picture is available. One teacher's " good " is another teacher's " fair "—one teacher's geese are all swans.

Intelligence Tests are being increasingly used, and as these become more reliable and teachers become more practised in the use of them, more reliable evidence over a long period of time will become available.

Also, it is becoming increasingly the practice for L.E.A.'s to hire a skilled examiner to do the work of selection for them. Practised and experienced specialists, such as Prof. Godfrey Thomson, take over the whole work of selecting for free places in an area, and do actually set papers which in no way prejudice the work done in the schools during the year. Until the perfect form of record is evolved, this practice seems so far the best solution. It should be added that even where a skilled examiner is hired to do the work, weight is always given to the opinions of the Head Teachers and teachers as to the fitness of a child for secondary education. Indeed, it is very probable that teachers could, without record cards or examination, select suitable free place holders just from their personal knowledge of the

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children. But they would then be open to all kinds of criticism and perhaps attack from parents who considered that their child had not had "fair play". Some kind of outside selection would seem, therefore, to be necessary, if only to safeguard the teachers.

However bitterly we attack examinations in England we do not often imagine an educational system which could do without them. From five years old to twenty-five we are in their grip, and the last is apt to be the worst. Schools examine at least annually, and these annual examinations increase in difficulty and scope. Colleges or Universities set examinations which cover two, three or four years' work, and the effort required to deal with them is correspondingly greater. America, among her other experiments, has devised a method by which examinations, in the English sense, are nearly abolished. In particular, the final examination is but little known in American Universities. Evaluation of students' work there is accomplished by a system of *credits*. From the grade school to the University, from babyhood to doctorate, certificates of satisfactory attendance at courses of instruction are collected by the pupil. The courses vary in length. In the schools they last a year or a *semester* (a half-year); in Colleges and Universities they last a *session* (a term) or a semester.

The conditions of gaining a credit certificate are regular attendance, and the adequate performance of such work as is set by the instructor. This is generally *recitation* in class, i.e. the answering of questions on the assignment, or the working of tests, such as "true and false", or "completion". Very rarely essays are set. At the end of the course a miniature final examination on the course is often held, and the credit is endorsed A, B, C, or D, according to the degree of success that the pupil attains.

For entrance to High School, or College, or for certain courses in the Universities, the field from which credits

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can be drawn is very wide. For instance, a student, wishing to take a particular course, must have so many credits in English, in a foreign language, in Physical Education, etc., but he may fill up his total number by credits in very diverse subjects, such as Millinery, Tennis, Skating, or Public Speaking.

The period during which these credits can be collected is not strictly limited, although colleges vary in this respect. Men and women in the thirties and forties may still be acquiring High School credits, to present for entrance to College. Some students take as long as ten years to acquire credits for a life certificate for teaching (normally a two-year course).

Thus there is no examination in which the result of the students' work, during a prolonged period of time, is examined. All is done in small disconnected sections. Thus, a student in a Teachers' College, may collect credits in Shakespeare's Comedies, Contemporary Literature, Journalism, Seventeenth Century Lyrics, and The Essay, but there is no course, or examination which brings all these together in one related whole.

The disadvantages of the system are obvious. To live with and study a subject continuously for two or three years gives a grasp of the subject which it is impossible to gain from a disconnected series of unrelated sections. The final examination as we have it, may task a student's health, and may be grossly unfair in some particulars, but it forces the student to organize his subject as a whole, and to see it with its parts interconnected as no collecting of credits will. Then, since every instructor gives a grade (or mark), according to his own light, there is no general standard of achievement. An A credit in Shakespeare in Diggers' Gulch College, may be really lower than a D in an Eastern University. Even within one college in the same subject, different instructors vary greatly in their grading. Far greater discrepancies are discernible in the grades given to students in American Colleges (despite the

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carefully-planned tests and curves of marking) than are apparent in a well-conducted English examination.

The practical result of the variability of standards is that one school will sometimes not accept the credits awarded by another, much to the discomfiture of a child who wants to change his school. Still more widespread is the refusal of some colleges to accept the credits of some schools at their full value. A school with a mediocre reputation may get its credits marked down 50 per cent.

As there is no central authority for education in the United States, so there are no nation-wide examinations. A school in Colorado has no means of seeing how its standards compare with those of a school in New England, except by this uncertain one of acceptance or rejection of credits.

At present some attempts are being made to remedy this. Within a single college the application of the curve of probability to the test results is fashionable, and ensures that a certain proportion of students shall get A, B, C, D, or E grades. Assuming that the intelligence of successive groups of students remains constant, then the instructor's standard must also remain constant, if his tests remain of the same difficulty.

But this only affects one college with one type of student and one standard of teaching. A method of wider application is being gradually adopted. Some Eastern Schools and Universities are holding Entrance Examinations after the manner of the English Schools and Colleges. The failure or success in passing these helps to establish a standard for other schools, who enter pupils for the Entrance Examinations. Further, Columbia Teachers' College has made a list of Teachers' Colleges whose credits are acceptable at face value, and thus has established itself as a national standardizing agent. And, lastly, the American Association of University Women has refused to admit graduates of certain Universities and Colleges to its ranks. The

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method of judging whether or not a College shall be admitted is by investigation, inspection, and reputation. There is no examination.

This individualism in educational ranking is part of the whole fabric of American thought. The independence of each state is shown in a thousand ways. Each state, almost each city, has a different set of traffic laws, and the tourist endeavours to keep all he knows all the time, since he is never sure which selection is in operation in the part of the country in which he is at the moment. So in education there is no prominent national University to set a standard, as Oxford or Cambridge do in England, nor is there any reason apparent to local educationists why they should modify the ideas that they have hit on in order to conform to the standards of another state. This condition of affairs is as old as American education. In the pages of Mrs Trollope's *The Domestic Manners of the Americans*, we find Cincinnati enjoying an education that is comically like that given to-day in the less enlightened colleges of the more backward states.

Great as are the disadvantages of the credit system, it also has its advantages. Since it removes the necessity for the concentrated and prolonged study demanded by a final examination, it allows pupils from about twelve years onwards to earn part of their living while attending School or College. In certain Teachers' Colleges of the West, 75 per cent. of the students earn part of their keep by the allowed three hours' work in cafés, beauty parlours, pickle factories, beet fields, and most commonly, domestic service. Since they are allowed to spread out the period of credit earning they can adjust the relative periods of study and earning to their financial requirements. In consequence, at least five times as many people, in proportion to the population, go to College in America as do in England.

The fact that students are at least in part independent wage earners has important effects on their relation to

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their College and the subjects taught there. They are not really *in statu pupillari*, and cannot be treated so. They are in a position to demand what they want from the College, not to accept meekly what the College is pleased to give them. They are knowledgeable in the ways of the world ; they may even be in positions where they oversee and direct other men's labours. In consequence, they demand and receive treatment from their teachers different from that which the student receives in England. The teacher feels himself the hired servant of the students, rather, perhaps, as did the teachers in the Continental Medieval Universities. He meets them as man to man. If he cannot hold interest by his personality or subject, the students will leave his classes. The dignity of position alone is not strong enough to support him.

Not only has this credit system economic and social results, but it also produces a different evaluation of mental qualities. Versatility and diversity of interests, as opposed to concentrated study, are no drawback, as they very well might be to the English student. The proportion of people who fail to get a degree, or satisfactory credit, is amazingly small. Every College student makes preparation for his graduation with complete confidence. The lecturer about to take a year off announces without fear that he is going to take his doctorate. There is none of the anxiety which attaches to the work of the English student, and the pure scholar is a rare production and not highly prized.

There is another result that mainly affects the teacher. The English teacher spends a large part of his time in the work of correcting essays and exercises. The papers worked by pupils in "Completion", "True and False", "Multiple Choice", and other such tests, can be marked mechanically by applying a stencil to them, and regarding as wrong those answers which do not agree with the lines or dots on the stencil. So easy and impersonal is this work that in America "markers" are hired from

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the body of students and paid fifty cents. to a dollar an hour for doing the work. The actual teacher is free from the least productive and most soul-destroying portion of his work, and he can look at the results achieved by his class in an impersonal way. At the same time he loses all the intimate contact with the minds of his students that an English teacher gains through reading their essays.

QUESTIONS FOR DISCUSSION

- 1.—What type of person do you think suffers in the ordinary type of examination? What means could be taken to alleviate this?
- 2.—If you had been required to take the "new type" of examinations instead of the older one, do you think it would have made any difference to your success?
- 3.—Construct an examination paper for children of 13 on *The Tudor Period* and on *Asia* in (a) the new style.
(b) the old.
- 4.—What points would you bear in mind in evaluating essay by children of 11 years?
- 5.—Describe lessons which you have heard which have been clearly determined by examination requirement.
- 6.—Discuss the value of examinations as incentives to (a) hard work, (b) love of scholarship, (c) general culture.

BOOKS

- P. B. BALLARD, *The New Examiner.*
Group Tests of Intelligence.
- GODFREY THOMSON, *Instinct and Intelligence.*
Northumberland Mental Tests.
- L. M. STEDMAN, *Education of Gifted Children.*

THE SPECIAL SERVICES

It is difficult for anyone outside the elementary school system to realize how widely it covers the children's lives. The teaching of the three R's or of school subjects is but a part of the activities included in elementary school provision. An analysis of the cost of education shows this clearly.

In 1930 to 1935 the average cost per child in England and Wales was £13 3s. 5d. Of this amount, £8 6s. 7d. went on teachers' salaries, and 8s. 3d. for contribution to teachers' superannuation, 16s. 3d. for loan charges, i.e. for interest on, and repayment of, moneys borrowed for new buildings; 11s. 1d. for administration and inspection, i.e. for directors', clerks' and local inspectors' salaries, etc.; £2 1s. 2d. for rent, rates, insurance, fuel, light, cleaning, books, apparatus, stationery, repairs, etc.; and £1 0s. 1d. for special services.¹

These special services have grown rapidly in the last thirty years, and are still probably the most progressive part of the system. They comprise the School Medical Service, provision of meals, special schools for defective children, organization of physical training, play centres and nursery schools.

Everyone who remembers elementary schools before the Great War will remember the pathetic appearance of many children therein—the number with sores on their faces, with festering cuts on hands or knees, sore eye-lids, and a general look of uncared-for disease or unremarked neglect. One remembers still with a somewhat sickening feeling the odour peculiar to the elementary school class-room.

This is all changed. In 1910 there were thirty clinics to treat children's minor ailments—to-day there are

¹ *Cost per Child. Elementary Education.* List 43. H.M. Stationery Office, 1936.

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2,037, and practically all L.E.A.'s provide them. Help, advice, material, skilled treatment are available to every child for ailments and accidents of all sorts.

Routine medical and dental inspections of every child, at least three times during his school career, bring to light defects which need attention, and increasingly the doctors, nurses and dentists who carry on this work of examination in the schools and treatment in the clinics, are regarded as the friends of the children and of their parents. In most areas now provision is made for the treatment at clinics or in hospital of visual defects, adenoids and tonsils, ring-worm by X-ray, and for orthopaedic treatment, and there are 93 clinics for artificial light treatment.¹

This aspect of the Special Services will no doubt be developed farther, and, it is to be hoped, will become as important and influential in establishing conditions which prevent disease, as it has shown itself in making provision for the cure of disease. In many places the conditions of school buildings are such as to encourage the disease which the school medical service sets out to cure ; and in one town the writer knew of a school, all its windows shut and painted, in which was continually spreading the tuberculosis which the open-air school *next door* did its best to cure.

But already a healthy incursion into the conditions of ordinary school life has been made by the medical section of the Board. In the last few years they have emphasized increasingly the need for physical fitness, and for a healthier and freer type of physical activity. The inspectors of physical training and organizers have carried the gospel into the schools, and plans for new buildings include provision for the need.

Gymnasia and shower baths and changing rooms are being built in senior schools. Playing-fields of a size undreamt of ten years ago are now becoming normal. A senior school for 1,000 children may be built on

¹ *Health of the School Child*. H.M. Stationery Office, 1935.

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15 acres of ground. Elementary school children in many areas now change into suitable clothing for physical training, or at least leave off their heavier garments. The more all this develops, the more insistent will become the cry for halls, adequate playgrounds and spaces in all schools, wherever placed, and, one hopes, the more insistent and effective will be the demand for playing-spaces and facilities for children who have left school and for grown-ups.

But medical treatment of physical defects, and adequate exercise in the open-air and gymnasia are futile unless children are properly fed. And indeed, the undressing of children for medical inspection and for games has revealed, only too poignantly, how underfed some of them are. Figures are difficult to deal with ; for there is no objective and general standard of "adequately nourished", and what may pass as "average" in a South Wales distressed area, might very well be "bad" in a prosperous suburban area. Teachers know very well that the figures which are often quoted give no reliable picture of the needs of the children they see. The children do not only not get enough to eat, but they get unsuitable food. Thus, the medical officer for Chorley investigated the meals which children had, and says :

" This deficiency was emphasized by the frequency with which the children recorded that certain foods were 'home-made' or 'shop'. In 200 consecutive meals in which potatoes were mentioned the children described them as follows : chips 105, chips (home-made) 10, chips (shop) 62, and potatoes 23. Meat occurred with distressing frequency as meat pie, pork pie, meat and potatoe pie, corned beef, etc. Fruit usually appeared as tinned fruit, or in pies or tarts. Cake or biscuits were the usual substitute for pudding. Personal observation between the hours of noon and 1 p.m. of shops selling prepared foods has confirmed this. Apart from fish-and-chip shops there are 54 premises in the town

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registered for the manufacture and sale of potted or preserved meat, etc."¹

This is an area where many women work. It would seem that in such an area, especially, a great extension of the communal preparation of meals, or an establishment of some communal kitchen, where suitable food could be bought at low cost, is a necessary step.

The most recent widely-spread attempt to nourish school children has been the introduction of the schools milk scheme, by which every child can get, in school, a bottle containing one-third of a pint of milk for one halfpenny. In March, 1936, 45·8 per cent. of the children in school were daily taking milk in this way, and, says the Chief Medical Officer, "There is a wealth of independent testimony in the reports of school medical officers all over the country to the value which they attach to the provision of milk for the growing child, not merely in cases of subnormal nutrition, but also for normal children whose diet would ordinarily be regarded as satisfactory."² If a child is unable to afford this, he may be given free milk and he may also be given free meals—breakfast or dinner. This service has grown very much, but would seem to be still very much below what is necessary in some areas. "The proportion of children receiving free meals in any area, such, for example, as the special areas set out in Table V seems to bear little relation to the probable needs of this area either as suggested by the 'index of unemployment' or by the returns of subnormal nutrition. Nor, in those areas in which both free meals and free milk are provided, does it seem often related to the percentage of children receiving free milk. In most of these special areas the children who receive solid meals do not receive milk, and vice versa. This is to be regretted for the consumption of milk in these areas

¹ Quoted, *Health of the School Child*, 1935. H.M. Stationery Office.

² *Health of the School Child*, p. 33.

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is very small, and on the one hand the solid meals in too many cases consist almost entirely of the same type of food which the children are already receiving at home, while on the other hand the provision of milk alone, although providing most valuable supplementary food, by itself is not sufficient to rectify a diet inadequate even as regards calorie value, in the case of some of the children receiving free feeding."¹ In many senior schools the children stay to meals and for a small charge are given a well balanced meal. It is surprising how good a meal, at how low a cost, e.g. threepence a day, can be given when someone on the staff is prepared to investigate and organize the business satisfactorily.

Moreover, compared with twenty-five or thirty years ago, the characteristic odour in the elementary schools has almost gone. The decrease in uncleanliness and verminous conditions is remarkable. To-day, in the whole country, only some 450,000 were found to be unclean or verminous, and of these a quarter were cleansed² by the L.E.A., and the rest were probably under supervision until they were cleansed by their parents or guardians. It is rare, nowadays, to find an elementary school child in a filthy condition ; and the improvement in washing accommodation in schools, above all the introduction at long last, of hot water, should do much to improve the standard of cleanliness still more.

In Sweden, all children in the State schools bathe in school during school time. The showers in the senior schools will make this possible in England in future for children over eleven. In some nursery classes the little children can be bathed. It would not seem unreasonable that children between five and eleven should have some similar provision in areas where washing at home is difficult.

It is now fairly common, too, for L.E.A.'s either to run or to sponsor some form of School Camp or Camp

Chief Medical Officer in *Health of the School Child, 1935.*

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School. The former would be a holiday camp which in many cases would be largely supported by voluntary contributions but to which the Board may make a grant of some hundreds of pounds. The Camp School is a school held in some suitable country or seaside place to which the children go and live during school term, and where their attendance counts as attendance at school and therefore is recognized for grant by the Board to the L.E.A. At these schools are qualified teachers, and the children live there for one, two or three weeks, doing "lessons" which keep them indoors as little as possible, but making the best of activities in the open air, seeing and knowing trees, wild flowers, country life and animals, insects and birds, doing practical geography and benefiting by games and activities in good air plentiful suitable food and regular hours.

No charge may be made to any child for the Camp School except for his food. This cost is generally low, and a fortnight at a good Camp School may cost him only 7s. 6d. or 10s.—or even, in some areas, nothing.

The special services, it may be noted, also include the provision of special schools for the mentally and physically defective, the blind, the deaf and the epileptic. With the education provided there we are not concerned in this book. These schools are under medical as well as general educational supervision, have teachers and attendants specially trained for the work, and in many cases have been the means of giving the children otherwise condemned to a life of idleness and unhappy dependence, the means of earning a decent living by some trade.

QUESTIONS FOR DISCUSSION

- 1.—Give an account of the work of the School Medical Service as you have seen it.
- 2.—What do you think are the chief needs of children that so far have not been met, and might be met by these services?

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- 3.—Can you notice any changes between the physical training of your school days, and that in use to-day?
- 4.—Give a critical account of any special school that you have visited.
- 5.—Discuss the advantages and disadvantages of raising the school age to 15.
- 6.—Make an investigation in any school you know to see what happens to the children when they leave school.

BOOKS

- L. M. STEDMAN, *Education of Gifted Children.*
Education of the Adolescent. H.M. Stationery Office.
The New Prospect in Education. H.M. Stationery Office.
P. B. BALLARD, *The New Examiner.*
 Group Tests of Intelligence.
GODFREY THOMSON, *Instinct and Intelligence.*
 Northumberland Mental Tests.
Health of the School Child. H.M. Stationery Office. 1935.

DISCIPLINE

" You may be as good as you please, if you please to be good."

A DISCIPLE is one who learns. Discipline is literally the process of learning or training. The term implies that a person being disciplined is being so to some end. The army has a very clear notion of the end in view when it plans the discipline of its soldiers. It aims at making men fit in body and mind for warfare and at providing that ready obedience which is one of the essential factors in a well-trained army. Tennyson had military justification when he wrote exultingly :

Their's not to reason why,
Their's not to make reply,
Their's but to do and die. . . .

and it is to the production of this spirit that a great deal of the training of a soldier is directed. When, on the parade ground, he stands to attention while a sergeant abuses him, forms fours, presents arms and does a number of more or less unnecessary things in an artificial way, he is learning to obey commands without thinking about them. He is learning, so far as his soldiering is concerned " not to reason why ". The result to which all this leads is that when ordered to charge he does it. In this lies the great difference between trained and half-trained troops ; the former are dependable, they will do what they are told under almost all circumstances, while half-trained troops, though they know what to do, may still at some moment suffer a spasm of original thought and refuse to carry out a command. They are unreliable.

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A curious commentary was provided during the war by the different training given to infantry men and air pilots. The pilot had before him an exceedingly dangerous and highly individual job. He was taught to fly and to use machine guns ; but for the rest he did what he liked, his drills were at a minimum, and the American pilots at least were left to a large extent without control, and painted the town red to their hearts' content.¹ The infantry man went through the regular drill even if it was more hurried than usual. The pilot did not have to learn to obey orders. There would be no one in the air to tell him what to do. His own powers of initiative had to be developed to the fullest extent ; the infantry man would be under command and was trained accordingly.

In other cases discipline has been directed to some specific end. The makers of the monastic system knew what they were about when they disciplined novices. They meant to make good monks, who would remain in the order and scrupulously obey its regulations without thought of innovation.

By analogy school discipline should have an aim, but what is it ? The answer we give to this question will decide not only the outward and visible form of discipline in school, but also the spirit in which that discipline is applied.

Most people would agree that the object of discipline in school is to train the child in those virtues, sentiments, and habits which fit him to be a good citizen. We might go farther and say that we want to train the child to love the things which society most values, and without which society disintegrates. These qualities may be praiseworthy on higher grounds ; but the aspect we are suggesting here makes the matter clear enough. A society that can count on honesty, fair play, faithfulness, cleanliness, mutual consideration, and other such virtues amongst its members, is a happy and healthy society.

¹ *War Birds.* The diary of an unknown aviator.

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One that is torn by dissension, cheating, sordidness, selfishness and eaten up by disease is an unhealthy one, and is destined probably for quick decay.

From the point of view of the individual, it is clear that some discipline is necessary if the non-social instincts or tendencies—such as self-assertion, acquisitiveness, pugnacity—are to be adjusted to social ends. Here we are helped by the fact that although man has some tendencies which, untrained, are difficult or impossible in society as now constituted, he is also naturally a gregarious animal, and probably all his qualities are capable of being directed, adjusted and sublimated to social ends.

If we regard school discipline as a training which fits the individual for life among his fellow men, we shall have to consider what qualities we wish to produce in him with that end in view.

The older type of discipline, at school and at home, aimed amongst other things at producing obedience, and a kind of military relation between parent or teacher and child was established. Too often the requisition "must be a good disciplinarian" meant that the teacher must have authority to compel submission.

The child was not to reason why, but to *do*. If the task he was bidden to do was unpleasant and unnecessary, that was all to the good from the trainer's point of view. There was rife a kind of moral-muscle psychology, which declared the child to be trainable in obedience, honesty and what not, and regarded these virtues as simple, always-the-same entities which, once trained, would always work mechanically. "Teach the child to do as he is told"—and he will always do it. Obedience, in itself, said they, is good.

Locke, generally a humane writer, becomes merciless when on this subject, and quotes with approval the case of a woman who "whipt her little daughter . . . eight times successively the same morning"¹ in order to

¹ Locke, *Thoughts Concerning Education*, § 78.

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secure obedience to some small command. The Victorian father was every bit as inflexible. This is the state of things in one house:¹

"Breakfast in the Grant nursery consisted of cold milk and dry bread, except in the depth of winter, when there was hot porridge. It happened that all three children had a passionate, uncontrollable objection to milk; but their father was not going to stand any nonsense of that sort. Milk was good for the young. So the 'milk rebellion' was crushed. In his dressing-gown, with a whip in his hand, Mr Grant attended nursery breakfast, and a beseeching look from any of his victims was answered by a sharp cut followed by as many more as were necessary to empty the basin."

Other examples are easy to find.

"It was the custom then to teach children very early, and at three years we were expected to learn to read. Before I was six I learned all the rules in Lindley Murray's smaller grammar by heart, the multiplication tables, French verbs and a good deal of rhyme. When my younger brother was born, my sister and I were placed under the care of a governess, Miss Taylor . . .

"She was a very strict disciplinarian, and we were vigorously punished when we infringed the laws of her schoolroom. We spent twelve hours a day under her supervision. The system of the day was to administer corporal punishment. We were shut up for a day at a time and fed only on bread and water. Sometimes it was an empty room, and once in a room never opened in a so-called haunted house which my father had taken for the shooting season . . .

"While with Miss Taylor our feet were placed in the stocks during lesson time, and we held a back board behind our backs, being seated on narrow seats that only just held us. The day commenced by our being wakened by our nurses, taken by the two and plunged over head in a deep bath of cold water. Our cribs were made for

¹ D. M. Stuart, *The Boy Through the Ages*, p. 261.

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us by the joiner engaged in the house, and were of pine wood without springs, and had cross bars on which we rested our mattresses of straw. . . .

"As a child I loved all games and used to long to play cricket and go out fishing with the boys and to ride to hounds. But such was not then permitted, and I had practically no amusements."¹

Psychologically, of course, the thing is unsound. Such treatment produces, as often as not, open defiance, not a meek spirit and contrite heart. "Despotism tempered by assassination" was the régime in more than one school and home. Witness Edward John Trelawney, that most delightful of rebels, aged ten or eleven :

"As my bodily strength increased I became, out of school, the leader in all sport and mischief ; but in school I was in the lowest class. I was determined not to apply to learning and to defy punishment. When satisfied with the ascendancy I had gained over my school fellows, I turned my whole thoughts to the possibility of revenging myself on the master. I first tried my hand on his under-strapper. . . . Once a week we were refreshed by long country walks ; in the course of one of these the tutor sat down to rest himself ; the boys not acquainted with the plot were busy gathering nuts ; my chosen band loitered near, preparing rods ; when I, backed by three of the strongest, fell suddenly upon our enemy. I got my hand round his dirty cravat, which I continued twisting ; the others seized his arms and legs and threw him on his back. He several times nearly succeeded in shaking me off ; but I never resigned my hold, and when his struggles had driven away one boy, another took his place, till, completely overcome, he entreated us, as well as he could articulate, to have mercy and not to strangle him. I gripped him the tighter, till the sweat dropped from his brow like rain from the eaves of a pigsty. We

¹ Mary Elizabeth Haldane, *A Record of a Hundred Years, 1825-1925*, p. 43, pub. Hodder & Stoughton.

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then gave him a sample of flogging he could never forget. . . .”

On the return to school the story was told to the Head, who called Trelawney to him, “. . . standing three steps above me on a raised platform. The boys, like young horses when they have learnt their power, were unruly. I stood, not as I had done, drooping before his angry glances, but upright, and full of confidence, looking him in the face without quailing. He accused me—I pleaded my justification—he grew angry—my blood mounted to my forehead—he struck me—and I, with one sudden exertion, seized him by the legs, when he fell heavily on the back of his head.”

Trelawney was then shut up in a room which he set on fire. After this he was dispatched home; and his father’s comment on the whole affair to his wife was, “ You seem to have influence over your son. I give him up. If you can induce him to act rationally, be it so; if not he must find another home.”

This state of things went on much more recently than people often realize. Men of sixty years old well remember the days when schools, especially country schools, were strange places. In one district, a visitor arriving in the afternoon would often find the master sitting on the floor, a half dozen beer bottles by his side, and the children dancing round him singing “Three blind mice”.

A monitor, thirteen years old, in charge of a class of about thirty children, might have to fight desperately to retain his authority. One such had among his pupils a lad of fifteen, bigger than himself, and given to throwing books at his class mates. For some time the boy teacher said nothing, being really afraid to interfere, then one day, taking courage, he reproved the delinquent. The book was instantly thrown at his head. Feeling that it was do or die the monitor rushed at his pupil, and a real fight began. When the master of the school arrived and separated them, the monitor had two black eyes

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and the pupil a bleeding nose. However, a stronger arm administered a flogging and there was quiet in the class for the future.

Even quite recently remnants of this existed, and one of the authors, in her first post, suffered from a child who threw ink pots at the teacher or anybody else who reprobated her ; and in the same school, a few years earlier, a boy had made a collection of slates, removed the protective wooden edges, and stood a siege in a classroom, hurling his really dangerous missiles at anyone who attempted to enter.

The most powerful influence in the change from the military discipline to modern conditions was probably Froebel. Asserting that the child had a right to fulfil his destiny *as a child*, and not as a potential citizen and adult, he established the doctrine and practice of "education through play", or the kindergarten. "Let the child enjoy his natural childish activities," said Froebel, "and he will in that way develop into the normal healthy adult." Education through play necessitated as its first condition that the child should be as free as possible to follow his own interests, and iron discipline went to the wall.

In 1860 private Froebelian schools for little children flourished. In the 1870's the London School Board appointed a woman disciple of Froebel to be Inspector of infant schools in London. Through her, Froebelian ideals were introduced into the London infant schools. Thence the liberal ideal of discipline has spread upwards to the girls' and boys' schools in London and outwards to the provinces. In 1890, in the Midlands, a teacher, nineteen years old, was still expected to control eighty babies from three to five years old, and to keep military order. When she refused to keep the class in for talking she was only saved from dismissal by the timely intervention of an enlightened Inspector.

Supposing the older methods did produce obedience, it is highly questionable whether unintelligent obedience

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is a desirable social virtue. We are not to obey every tub-thumper who commands us to rise and slay our oppressors, neither are we to be led like lambs by quacks who tell us to take "X's Pills, and do it now!" The English state does not require, nor is it organized to deal with a nation of implicitly obedient people. We aim at civic and social virtues tempered by intelligence. Patriotism, loyalty, obedience, are relative terms and may sometimes be as harmful socially as they are at other times valuable. It all depends on the object of our loyalty or obedience as to whether these qualities enlarge or belittle our vision. Other social virtues, such as honesty, fair dealing or consideration for others, also need intelligent interpretation. We need some basis for our morals which is both wide and adaptable. The cultivation of no single virtue is enough, and any virtues that are cultivated must be directed to achieving some end beyond themselves. What we are looking for is some general expression which will cover the social virtues. We can find various formulae which differ from each other only in the depth and positiveness of their teaching. We can say that we want children to respect others ; or we can formulate a principle, which expands the more it is looked at, "Never do anyone any harm" ; and lastly we can take the supreme Christian expression of this attitude and say, "Love your neighbour as yourself".

This principle, particularly on its positive side, cannot be enforced by compulsion. Conduct in accordance with it can only spring from a developed sentiment of positive benevolence, and coercion will destroy this sentiment more quickly than any other means. No drill has yet been devised that will make men love to numbers. The building up of the social sentiments should be the underlying purpose of all educational discipline, both at home and at school. It must be done by example and encouragement, by the gradual establishment of a confident and affectionate relation between

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the individual and the environment. It is fear that makes most men cruel, and where a child has met no hard treatment there is nothing to alarm him, and he is confident and kindly ; but a frightened child will act in anti-social ways, as a badly-used cat will scratch the hand put out to stroke him. Then, too, a child whom the world has used kindly has nothing to revenge ; much of the serious naughtiness of children is done in an obscure attempt to get even with things.

It is a charming sight to see the confidence and yet real modesty in the bearing of a child who has been brought up to respect himself and other people, and who has never been spoilt and never treated harshly. There is obedience and independence, thought on the matters which are within his understanding, and a confident reliance on the wisdom of older people in others. The teacher who can secure this type of discipline is the perfect disciplinarian. He represents at its best the newer type of discipline which derives its power chiefly from co-operation between teacher and child, in contrast to the older type which rested upon the authority of the teacher. The watchword of discipline in this newer sense is "order and liberty", aiming at the production of a character which will pursue its own way with vigour and independence but with due regard to public convenience and safety.

Too often, however, discipline is regarded as meaning a far lesser thing—the training of children, not to fit into the large world outside, but merely to adapt themselves to the school of which they are part. Discipline in this sense is often limited to mean forbidding children to talk in corridors and cloak-rooms, making them stand in straight lines or sit still in lessons. This discipline is liable to magnify offences against rules, which exist merely for the supposed convenience of the school, to the size of crimes committed against the basic laws of society. A child who has spoken in a silent period has committed no moral offence. He may have made a

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friendly remark to his neighbour—a praiseworthy social act ! But the teacher intent on good order is only too likely to make the child feel that such an act is on the same footing as lying or cheating, which are offences against the moral bases of society. A teacher must keep the distinction clear in his mind between discipline which is training for the large world outside, and discipline which is merely a code of laws or manners imposed for school convenience. There is much to be said about discipline in the narrower sense and only good can come from a separate discussion of it, if we remember always the broader issues behind it, and view the detail of school discipline in the light of the far more important social problems.

School conditions make school discipline an extremely delicate problem. Children are asked in school to do very unnatural things ; they are also only with the teacher for a part of the time and their characters have been formed at home, often in a way that renders the teacher's task very difficult. At one end of the scale the teacher finds the child who is bullied and beaten by his parents, at the other the spoilt child who has never known any control ; and in both cases problems of many sorts arise which interfere with the orderly conduct of class work. In consequence the ultimate aim of discipline is hidden behind the immediate cares of class and school order, and the worry and racket of offence and reproof drive nobler considerations from the mind.

This daily hand-to-mouth discipline falls into two classes : I. The discipline necessary in the class-room so that the teacher can give his lesson and the children attend to it in the most profitable manner. II. The general order in the school which is concerned with behaviour in the corridors, the cloak-room, the arrangement of lines in the hall and playground, or with other such matters.

I. Order and attention in the class-room are absolutely essential for teaching, and unless a teacher can manage

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to command them, his teaching cannot be effective. Yet in this most important matter comparatively little help can be given by an outsider. It is often said that class-room discipline is "all a matter of personality". When this is said, it simply means that the critic has no concrete suggestions to offer, and therefore it is the most helpless comment to make to a struggling student. Yet in a way it is true. There are some people whom children do not rag, they do not even want to rag them. It is not always the interest of the subject matter of the lesson which keeps the class quiet ; it is something in the manner of the teacher, his calm confidence, his vivacity of manner or the quality of his voice that attracts and holds the attention.

The persons who have been found most frequently to have this power of natural discipline, possess certain traits of character or manner. They are quietly confident, and seem so interested in what the children and they themselves are doing that no thought of trouble occurs to them. No one is more suggestible than a child. If the teacher's manner suggests quiet industry, he responds. If the teacher by the slightest sign suggests trouble, the child is quick to take the hint. There was once a young teacher who was so afraid of interruptions that she began every lesson with, "Now, I shall ask at the end of the lesson, who has spoken to anybody but me!" And she was puzzled by the immediate "playing up" of half her class. The fewer references there are to sitting still, not talking, and the thousand and one tiresome tricks of children the better. Discipline should be a positive, not a negative thing.

Hence the successful disciplinarian is one who has a clear and foreseeing mind and by natural tact or studied preparation outwits Satan by leaving him no idle hands. Young teachers often suffer because there are hiatuses in their lessons, or between lessons, when the children, having nothing to do, amuse themselves in a way which

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creates disorder. The beginnings and ends of the lesson are frequently the worst moments for a poor teacher. The remedy is, first to reduce the inter-lesson business to a minimum, by getting things given out before school or in play-time ; secondly, to have a clear plan in one's mind as to what is to be done ; to make that plan as simple as possible ; and to have all in readiness for carrying it out. It is when the harassed teacher discovers that he is six books short, or that the pencils are not sharpened, that he gets excited, loses his temper, and chaos ensues.

It is always a good plan to let as many children as possible have jobs to do in connection with the management of the material side of teaching. By being responsible themselves they learn the point of view of those in responsible positions, and see the reasonableness of order by themselves reaping its advantages. If all the children know the time table, and know what is coming next, they should be able to help in preparing for it.

A third quality which the natural disciplinarian possesses is that of emotional stability. Without being heavy, and without hiding his enthusiasms, he controls his excitement, his temper, and his whims, so that the children always have confidence in him. They "know where they are" with him. They trust his judgment, feeling that it cannot be overthrown by the feeling of a moment. He is as unlikely to be swayed by anger as by favouritism. Perhaps no quality in the teacher wins so much respect from children as a reputation for absolute fairness, justness and reliability. Its value as an example to them, and as a standard, cannot be over-estimated.

Emotional instability is expressed in many ways which excite or irritate children. The high-pitched shrewish voice of the woman teacher, the restless movement of arms and hands, or nervous pacing about the room, the worried hectic look and frown, the tense posture of the

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body—all these convey to the children a sense of over-wroughtness which makes them troublesome in class. The teacher must train himself to relax even in times of stress. To make oneself pause and take several deep breaths is a good plan ; if one is a woman, the assurance that one's hair is tidy and one's dress neat is a great help. The woman who argues or rages so that her hat is all askew, her hair in her eyes and her face red is an object of derision to children and to adults alike.

Another important quality is that of sweet reasonableness. Children are irritated by "fuss-pots". They have respect for a person who knows where he stands, whose motives are clear and acceptable to them, and who, while meaning what he says, can be depended upon to act intelligently in interpreting a rule or in judging a particular case. Children resent commands or rules which they suspect of being given or made merely to demonstrate the teacher's authority. Many a high-spirited child breaks such rules just to show that he isn't the sort to be "downed by *that* kind of thing".

Lastly, one must commit a truism and remind teachers that example matters more than precept. If the teacher himself is a person ready to help, and co-operate ; if he is cheerful, orderly and reliable ; and above all, if he keeps alive both human sympathy and a sense of humour—"all other things shall be added unto him". It is because of example and inspiration that personality counts so much in discipline.

When all is said, however, the personal prestige of any individual teacher is greatly affected by the attitude of the Head and the other members of the staff. Any teacher should be able to rely on the Head at least appearing to support his authority. A junior teacher who finds that a situation has got beyond his power to manage should be able to send the ring-leader to the Head, confident that the culprit will at least receive a suitable rebuke ; a form teacher should enforce the views of a specialist, and impress on a class the baseness of bad

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behaviour with one who has perhaps less influence because his periods of teaching are more intermittent. Where this support is withdrawn the individual teacher is placed in a position in which it is very difficult to acquire discipline ; and, until one has experienced a case, it is almost incredible that any Head should consistently refuse to support a teacher who appeals to him. Yet many teachers have found schools in which this happens. The only wise course for them to follow is to leave the school as soon as opportunity offers, and seek a wiser superior.

II. The general order of the school concerns each individual teacher in so far as he has to administer the laws made to enforce it, but it is also a matter of public concern and the rules are generally planned by the Head. There still survive schools in which the worship of the beauty of order is carried to excess ; where the children are always standing in line, wearing white hair-ribbons on certain days, marching in twos here, or not speaking there. This kind of discipline is the result of somebody's lust for organization, somebody's unconscious desire to give human life the beautiful precision of a machine. Girls' High Schools are often worse in this respect than elementary schools. Excessive rules are an irritant to the younger children, a challenge to the older ones—and a joke to the old girls. The ideal is to have as few rules as is consistent with getting jobs done quickly and pleasantly. Schools will naturally vary in this respect, and awkward buildings, a small staff, or a difficult time table will all have an influence upon the rules of the school.

One of the most successful boys' preparatory schools in the country lives on a minimum of public order, and shocks tidy-minded visitors ; yet the essential discipline of the school is excellent, and the boys leave it with affection and in time send back their own sons to it from the ends of the earth. Here the buildings are convenient and the staff very large. The following is a description

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of the first twenty minutes of a school day. At about ten minutes to nine the boarders assemble in the field or school yard and do physical jerks, the day boys may join in if they want to. Then when they are dismissed from this, they rush into the hall and seize their hymn books from a stand. For five minutes the hall is full of a struggling, yelling mass of boys. The staff stay away because the yelling is unpleasant, but as one remarks, "the more they yell before school the quieter they are later". At nine the Head Master and the staff enter, pushing their way through the throng, which subsides into something like rows behind them. A hymn is sung and then the roll is taken by the head boy in each form calling out the names of the absentees. The method is primitive, but it is good for the boys to take this much responsibility, and it is fairly efficient. Then if the Head Master has anything to say he says it, but if he takes too long the crowd grow restless and begin to shuffle. He shouts, "Quiet now," and they are still. At the end he says, "All away," and a torrent distributes itself to the different class-rooms, upstairs to the art room, or across the yard to the other buildings. The staff wisely *follow* their classes to avoid being trampled on. These boys can stand in line when required, they can be quiet, and in a moment of emergency are most reliable; but on ordinary occasions there is no necessity for exercising these powers. To enforce superficial order would worry the staff to death, and so it is dispensed with and everybody gains.¹

If superficial order is desired the aesthetic beauties of it must be pointed out and appreciated by the children, or else the intellectual amusement that can be derived from organization must be shown. Labour-saving devices arouse in some men's hearts a glow of pleasure—it is possible that some children might be similarly affected by a contemplation of the most ingenious way

¹ For a parallel attitude compare Pericles' Funeral Speech (*Thuc.*, Book II) on the courage of the Athenians and the Spartans.

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of distributing pencils or books. But only the few would see the charm of the device, as only the few among adults really like to be saved work at the expense of ingenuity. If the aim is to produce the love of organization for its own sake, the children themselves must be asked to take part in the invention of rules and devices, not just drilled into acquiescence with those invented by their superiors. Cloak-rooms are at times so cramped that it is necessary for the children to pass through them in single file if they are to get their clothes quickly, entrances may be narrow and ill-placed so that arrangements for entering and leaving the building in a special way must be made, but the inventor of a system should assure himself that every regulation is really absolutely necessary. For a long time it was regarded as an axiom that if children were allowed to talk in the corridors when going to and from class-rooms, they would loiter, and many schools still hold the belief; yet schools which have tried the experiment of liberty, even in buildings where the corridors are very narrow and inconvenient, have found no bad effects. This is typical of the fate which most regulations would suffer were they put to the test of experiment.

If a wider parallel is required for this matter of school organization, it is provided by the laws of states. America probably possesses more laws than any other country; and it is the land of Chicago and San Francisco. England has far fewer laws and public order is infinitely better. There are two factors to be considered here. American laws in many cases go against public sentiment, and where a nation means to break a law it can. The best example is prohibition. The thing is a joke, and every law officer breaks the law as constantly as those he is supposed to coerce. In a large Western city the Bar Association of Lawyers holds a banquet every month to "destroy" confiscated liquor.

Secondly, the organization for enforcing the law is better in England. The American policemen are

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notoriously venal and a Mayor of Chicago can boast that he will break any policeman who attempts to enforce the law. The English "Bobby", though he has his lapses, has an international reputation for probity.

Lastly, though the English law is severe, it is in accordance with the bulk of public opinion. There are advocates of prison reform and people who wish to abolish the death penalty, yet the great majority of the nation look upon the punishments English law inflicts as just, and would not hesitate to hand a criminal over to the police.¹ In America it is different. Up to 1913 at least, the prisons of the West of America were such that all decent people must have repudiated them.²

The moral of all this applied to school work is, have few rules, enforce those that you have with strictness and impartiality, and be sure that the rules themselves and your methods of enforcing them have the support of the children's opinion and sentiment.

If this is to be so, it is clear that school rules cannot be as the laws of Medes and Persians. They will be live things, changing and growing with conditions, and especially with the children's capacity to rule themselves.

At this point, therefore, we are come upon the problem of who is to make the rules in school—the Head, the teachers or the children? Is self-government possible? What is meant by free discipline, and how far is it practised or practicable?

With regard to the making of rules, there has until recently been no doubt that the Head and teachers did the ruling, but democratic ideals have now established themselves, and the questions considered are how to give the children more and more share in the government of themselves. But let us admit at once that although we want to give the children training in organization and ruling, as well as in being organized and ruled, the school

¹ v. Galsworthy, *Escape*.

² Jack Black, *You Can't Win*. Jack London, *The Jacket*. Alf Jennings, *Through the Shadows with O. Henry*.

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possesses a natural aristocracy. The teachers, in learning, experience, strength and persistence are the superiors. Their intelligence quotients may show them inferior, but pure intelligence is not of much use without experience.

The child, especially in an elementary school, is hopelessly inferior. Whatever schemes of self-government are adopted the real relations between the parties must remain the same. In a secondary or public school the matter is rather different. The older children are quite fit for various positions of command, and in certain spheres hold them. They are captains of boats, football, or cricket, and perform their own functions, subject only to a general accountability if anything goes wrong. The older boys are also well able to understand the purpose of the school, to take charge of their own work, with a little guidance, and even to direct the work of others. They are fit to be consulted in minor matters of government and in practically all schools this is done.

When, however, democratic principles are accepted in schools for younger children or when the whole of a secondary school is called in conclave, the matter is rather different. Frequently all that self-government amounts to is that certain police functions are delegated to the children, who have about as much say in the making of the rules they administer, as the policeman on point duty has in the traffic laws. The police system is extremely useful and convenient. It saves the staff trouble and it avoids a great deal of friction by letting the odium of enforcing unpleasant regulations fall on children who have been specially selected as able to bear it. It is also a good training for the children themselves, for they learn early the manners and duties of the commander of men. It is not, however, democracy.

Some schools, however, have gone much farther than this. The children elect representatives who make all the rules relating to discipline ; the rules are enforced by a system of policing and punishments. Delinquents are

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tried before a tribunal, in which the children themselves are judges and assess the punishment. The teacher may advise, he does not coerce. Many schools have tried this, many have been forced to modify it ; some because the responsibility imposed on the children takes more time and effort than they can well spare under the pressure of the present examination system, and some, because the children's judgment upon delinquents was so hard.

The Morley school at Denver, Colorado, practices a complete system of self-government. This is a Junior High School and the children leave at the age of thirteen. They enter at ten or eleven years. They are divided into houses, and each house has a Home Room. In the Home Room the affairs of the house are settled by an elected Committee with very full powers of discipline and punishment. Rules are made and offenders tried before a tribunal. Social activities are planned and reports of members' work examined and commented on. The teachers report bad work to the House Committee. The child officials report breaches of manners or discipline. The meetings are conducted with great decorum. The child Chairman presides in a very efficient manner. The Secretary keeps the Minutes. When the whole school meets in the Hall, Secretaries make their reports to the whole school. Neither the Head nor the teachers make any announcement concerning order or discipline. The children announce their own decisions. It is alleged that the staff merely "advises". The scheme apparently works well, although one cannot but feel that the time and energy spent by the children in making and enforcing their rules might be better spent otherwise.

In English schools so complete a system is rare. The prefect system generally receives nothing but praise, yet the following is the account of its working in one girls' school; and, whether the judgment recorded is accepted or not, the picture is true of many other schools,

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both for boys and girls. The writer of the essay from which the passage is taken was offered a post as prefect in this school, and refused it; she is not, therefore, biased by having her claims to office slighted.

"In a certain school, in which discipline of the most rigid type formed an essential part of its traditions, the Head Mistress suddenly realized that she could try a method successfully used in many other public schools—merely substituting so-called self-government in place of the usual passive obedience to authority. Accordingly the sixth form were duly instructed as to the best means of securing prestige, and making themselves generally formidable to their unfortunate inferiors. They were first told not to continue friendly intercourse with the people who had been their friends in the fifth form and who still had the misfortune to be in that form for another year, as that would be undignified. Secondly, they were told to keep the door of their room shut so that an air of mystery combined with terror should continually surround the sanctuary of the gods—and that any junior who might be called in on some occasion for a lecture on conduct might be overawed by the surprise of a scene she had never before encountered. The third injunction, which is almost incredible, betrayed absolutely that the real idea of democracy had not been grasped, for an essential part of self-government is complete sympathy and understanding between all members of every degree and status in the community—and not an arrogant tyranny on one side and passive obedience on the other. This last command was that on no account were the prefects to take any notice of the younger children or kindergarten, and never to play with them or secure their affection, for it was terror, and not affection, that was to characterize the attitude of the juniors towards their betters. It is surprising to notice that this scheme was received enthusiastically by the prefects, who congratulated themselves on their unique virtues which had singled

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them out for such positions—and with regard to their more immediate neighbours, the conditions of affairs was that of the Pharisee and Publican.

"Daily they conferred as to what new and formidable kinds of punishment they could use upon wicked offenders, and daily the number of such offenders increased. Yet this increase in number was apparently not due to the fact that the consequences of evil-doing were not sufficiently terrifying, for most of the children were obviously frightened of punishment, and would shake with terror before the army of prefects who united to judge the case. In fact, it was frequently the most nervous children who were the worst offenders. . . ."

The true idea of free discipline is to reproduce in the schools something of the conditions which normally obtain outside them. In ordinary life to-day we may do more or less what we like so long as we do not annoy anybody else. The law abounds with actions for "trespass", and such like vague causes of complaint, against those who by their own exercise of freedom hinder others in a similar right; but so long as we are inoffensive we may conduct our own affairs more or less in our own way. In the most delightful elementary school known to the writers, there is free discipline of this kind. The school is a junior mixed with classes of about forty. The children do not stand in lines, and are not condemned to silence, nor to speak only when they are asked after putting their hands up. The new teacher is puzzled by the freedom with which the children express their views. Oral composition lessons are almost unnecessary, since the children talk so readily with the teacher in all lessons. They help each other in Arithmetic and Handwork. They do individual work sitting on the floor, the window sills, or on top of the desks. "I like them to be high-spirited," says the Head, and high-spirited the children certainly are. One sees nothing of the sudden sitting up to correct attention when the Head enters the room. Relations between

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Head, teachers and children are perfectly natural and friendly. But if boys or girls "play-up" and are a nuisance to others, so as to spoil the possibility of freedom for the class, there is prompt punishment. Free discipline is nonsense unless it involves this element. Its essential feature is a training in the proper relation of the individual to society and this relationship involves of necessity self-restraint and consideration for others. A school which has not grasped this is training its children in licence rather than liberty.

The idea of discipline is intimately connected in many people's minds with rewards and punishments, but especially the latter. There is no theoretic necessity for this. It should be possible so to guide the child that he only did what was right, and only wanted to do what was right. Then he would form habits and sentiments of right action, and punishment would have no place. Unfortunately this is not so in practice. A child is always experimenting, and correction is necessary if only to show him which variations of behaviour are undesirable. In his education a baby must be both encouraged to do what is right and discouraged from doing what is wrong. The same holds true of a kitten. No amount of *positive* discipline will prevent it from getting on the table to look at the food there, it must be definitely discouraged from doing so by some "punishment", however slight.

In the older type of school discipline was almost entirely a matter of deterrents. One of the writers knew a school well where every teacher kept his own strap and used it frequently. The first sound that met you as you entered the building was always the sound of a blow. The disadvantages of this have been already discussed, and its effect on the children in this school was to make them absolutely unmanageable when the strap was temporarily in abeyance ; but in most parts of the country these methods have passed, and as more humane systems are employed, it becomes increasingly

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easy to control children. The perfect child, who had fully absorbed the social sentiments, would only need to be shown that such and such an act caused public inconvenience, and he would cease to perform it. We have not achieved the perfect child, but with many older children this method is used and is very fairly successful. It should be tried in all cases, because even if it is not entirely effective in itself, it helps the child to understand the cause of the punishment, and to develop a reverence for public order.

The principles which govern the type of punishment to be used are two. The punishment must be effective : that is it must be sufficiently unpleasant to make the offender unwilling to suffer it a second time ; it must be clearly connected in his mind with the crime, and it must tend to make him dislike the crime itself, not merely the punishment. Secondly it must not be injurious to the sufferer. This requisite bars many favourite forms of punishment. It is bad for a child to be deprived of fresh air and activity, therefore "keeping in" from play or games and after school hours should be resorted to very seldom. It also bars to a large extent the setting of impositions. It is an outrage to a child as a reasonable being to be made to copy so many lines of Latin verse at which no one looks, but it is also a gross waste of time, and, in the busy life that many children lead, such a waste of time renders it impossible for him to prepare his lessons for the next day. Occasionally the extraordinary situation arises of a child who never catches up, but is always writing impositions for the neglect of yesterday's lessons, and thus earning new impositions by the neglect of to-day's.

The natural and obvious punishment is the pain of a blow, and chastisement has always been the teacher's prerogative. At the same time the dangers of the method have also been known. Theorists through the ages have argued against the use of the rod, and many schools to-day never use it and keep quite satisfactory order.

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The log book of an infant school of the '70's records more than once that the Head "punished so and so severely". The same infant school records, week ending July 6th, 1876 :

"On Wednesday morning dismissed Frederick Summers for a determined repetition of an obstinate disposition in not repeating his Reading Lesson even after being punished corporally, and after three years' teaching of the alphabet."

The fate of this hardened sinner of seven can give us much food for thought. He was one of 130 children, and in charge of them were "the mistress, one pupil teacher, and occasionally the loan of a pupil teacher or monitor from the upper department". The teacher, as one who knew her recalls, was a great disciplinarian. She wore slippers in school and at the smallest offence off came a slipper, which was thrown at the child, whom she was never known to miss. These slipper throwings are not recorded in the log book, the "corporal punishments" there entered were something far more serious.

In any well-run infant school of to-day the cane is never seen, and its use in upper schools is on the decline. Yet there are occasions when its moderate use is to be defended. There is a type of child who is always trying to see just how far he can go without incurring any penalty that he minds. The experiment will be continued till authority pounces. Burt, in his book on *The Young Delinquent*, quotes an extreme case, in spite of condemning corporal punishment under most circumstances.

"On one occasion when a father and son came before him the magistrate was convinced from their manner that the father was not master in his own house. The custom is that the penalty (birching) shall be inflicted in a police cell by the officer in the presence of the parent. Sir John reversed the custom ; the father was told that if he would himself birch his son with the police

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officer standing by, he might save the boy from a conviction. The father hesitated, but at last agreed. After the birching the boy returned to court with the same jaunty air as before ; and the police officer privately reported that the father had hardly touched him. The pair were sent out for another attempt. This time the man came back with his head high in air, and the boy followed crestfallen. From that time forward there was no recurrence of misconduct."¹

These cases are on the whole fairly rare, and no teacher has a right to assume that the typically bad boy is one of them. Many children come to school exhausted by work at home, unable to learn, and with their nerves on edge. Punishment only makes the matter worse. On the other hand some children suffer from an excess of spirits and what they need is a run round the playground. There are in particular two cases in which the rod is used, where it is quite ineffective and often cruel—to punish mistakes in work and to punish lateness. The following are stories of the first case, known to be true.

In a village school of a year or two ago, there was a teacher (he may in all probability be teaching there now), who took Oral Arithmetic in this fashion. "All find out how many pennies there are in £5 17s. 8d. How many have *not* got an answer ? Hands out."

He then went round with a cane and hit the hands.

"The proper answer to the sum is 1,412. How many have it wrong ? Hands out."

He then hit those who had it wrong.

The other is of a schoolmaster of the last generation who believed that the proper English equivalent of *Peto* was "I ask for."

Jones, being asked what the translation of *petit* was, replied, "He asks."

"Come here," shouts the master. "What did you say *petit* means?"

¹ Burt, *The Young Delinquent*, p. 122, note.

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"He asks."

"No it doesn't," and he hits the boy. "Now what does it mean?"

The boy, no wiser than before, answers, "He asks," and is hit again, and so it goes on till one member of the class, unable to bear the scene any longer, shouts, "Say 'he asks for', you fool."

A certain London school was famous eighteen years ago for Oral Composition. The Inspectors lauded and quoted it. A curious Training College Lecturer investigated. This was the lesson he heard—through a wooden partition:

"To-day we shall do a composition on the Railway Engine. Now, take two minutes to think."

Silence.

At the end of two minutes—"Everybody tell me something in a sentence about a railway engine. Hands up! Hands *out* everybody who hasn't something ready." And all delinquents were caned forthwith.

"Now everybody tell me something else!" And so the lesson proceeded. The Inspector later visited the school, and, "put wise" by the Training College Lecturer, was forthwith disillusioned.

No amount of this kind of discipline can possibly produce good work. Fear paralyses thought, and it also makes children hate the process of learning and resist it by all the means in their power.

A similar treatment is often meted out to children who come late in the morning. Lined up they are first shouted at and then caned. No questions are asked to ascertain if they have a good reason for being behind time, and nothing is done to encourage them to be in time next morning. If school is going to begin so unpleasantly anyone would put off the evil hour as long as possible. The best remedy, perhaps, was invented by an ingenious and humane Elizabethan, and has been forgotten since.

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"P. The school day should begin at six.

"S. But it is hard for little children to rise so early.

. . . You would not have them beaten every time they come over late, as the custom is in some schools.

"P. That I take to be far too great severity and whereby many a poor child is driven into wonderful fear, and either to play the truant or make some desire to leave the school, at least to come with a marvellous ill-will. The best means that ever I could find to make them rise early, to prevent all this fear of whipping, is this: by letting the little ones to have their places in their forms daily, according to their coming after six of the clock. So many as are there at six to have their places as they had them by election on the day before. All who come after six, every one to sit as he cometh, and so continue that day and until he recover his place again by the election of the form or otherwise."—*John Brinsley*.

When milder methods of punishment have been introduced they generally take the form of order or conduct marks. The deterrent force of these is supposed to be that they carry "disgrace", and will probably bring down on the offender his parents' disapproval when he gets his end of term report with them entered on it. They are in great favour in girls' secondary schools, because corporal punishment is not used, and also because girls are on the whole very sensitive to public opinion. For conduct marks to be effective, there must be a strong public opinion against getting them, and schools which use them are compelled to foster this feeling by all sorts of means. There is much talk of "honour"—of the form or school. The recipient of a conduct mark is scolded by her form mistress and the Head, and generally made as uncomfortable as possible. With most children this method works, but like all

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punishments that depend purely on social convention, it fails with a certain number, and generally with those that are in most need of correction.

There is a certain school that carries this system to the farthest limit. Careful records are kept of all conduct and order marks and each child's collection for the term is added up. Then on the last day of term the school assembles, sitting on the floor of the hall. The Head Mistress enters.

"Girls, I have two duties to perform to-day, one a pleasant one, one unpleasant. I think it best to take the unpleasant first, so that when we separate it may be with joy.

"I will read out the list of those who have behaved worst this term. Mary Jones, stand up (Mary stands, feeling very tall among all the people on the floor).

"Mary, you have thirty conduct marks, more than two a week. I cannot think," etc.

(Mary giggles nervously, but as she had set her heart on getting thirty, and had been afraid that she would only manage twenty-nine she is not really depressed.)

The half-dozen worst offenders are so dealt with. Then with equal publicity the half-dozen best behaved stand up to be applauded. If a bad child is really well-intentioned and naturally nervous, she generally cries; if she is a hardened sinner she rejoices. The good girls rapidly develop into prigs.

Some more direct punishment is far better. One boys' school makes its delinquents do so much "pack drill" for each offence. The drill is done in the open air, is quite beneficial physically, and is suitably unpopular. It is also in a way fitting. Leaving your shoes about or talking in class are not moral sins. The "pijaws" in a girls' school are apt to represent them as such, and children are quick to recognize the falsity of the attitude; pack drill merely emphasizes that the

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thing is not to be done—it makes no moral or spiritual claims for the regulations of order.

Far more satisfactory as a means of discipline is a suitable system of rewards. Our aim is to make children want to be good, and if we can make virtue appear desirable we have done more than if we merely make vice dangerous.

Rewards, as punishments, can be divided into two classes. Those which are intrinsically valuable and those which acquire their value from social convention. Among intrinsically valuable rewards are prizes, such as books, pencils, or the sweets that a kindly teacher sometimes distributes on Friday afternoons, or exemptions from some irksome duty. Those of the first type are best, though many people scornfully speak of them as bribes. If the duty is really necessary it should be done, to excuse it is to falsify the teacher's position. A good example is the habit many teachers have of letting children out of school five minutes early as a reward. If it means that the teacher himself gets away earlier, the popularity of the device can be understood ; but as a reward it is bad. To let the child go is either to deprive him of valuable instruction or to admit that your instruction is useless and school unpleasant. If this may seem too extreme a conclusion for so slight an act, it can only be said that it is the logical deduction ; and the average child is not lacking in logic.

Material rewards do not offer these objections ; and they reproduce in miniature the actual course of life. In most cases virtue is not its sole reward. The good man, though he *may* fall on misfortune, generally gains a decent living, and some public esteem from his virtue. The good scholar can take a pleasure in his proficiency *and* enjoy the small rewards he receives in addition. School prizes are too small in value and too rare to form the only motive for work, and yet they can be very effective in encouraging effort. A few pennyworths of sweets will produce a marked effect on a class of small

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children, and the pleasure that they give would almost justify their distribution, quite apart from any educational results.

Purely conventional rewards, like the corresponding punishments, depend for their efficacy on public opinion. It is possible to devise a great many according to particular circumstances. A list of the children in order of merit may be put up in the class-room. Monitors may be chosen on the basis of virtue or success in school work.

On the whole, competition for an honour or a material reward is becoming more and more restricted. Teachers are continually emphasizing the fact that it is better to run honourably than to win the race, and nothing has done more to establish a sense of fairness and honour than the development of games and the games' spirit in school. Children are not now expected to cheat in schools. Certain precautions must always be taken against it, but these precautions can never be other than quite inadequate. The aim should be to rebuke cheating when it occurs by an appeal to a developed sentiment of fair play. The offender should find himself repudiated by his class-mates as well as authority, and his own heart should hold him guilty.

In many schools rewards are given to groups of children, instead of to individuals. The classes are divided into teams, each under a leader, and the teams are given marks for virtuous conduct or good work. This grouping and competitive spirit is especially useful in Physical Training. But the scheme can be carried to absurd lengths. When a teacher gives extra marks to the team that has "appreciated a poem most", the ridiculous has ousted the useful. In the same way schools are often divided into "Houses", with prefects, and Houses compete for good conduct marks. The child is thus trained in working for the good of the community of which he is a member instead of for purely personal gain.

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All these methods are effective in various degrees with various children, but on the whole praise is more effective as a stimulant than blame, always supposing that it is given judiciously by a person whom the child respects and whom he thinks has the right to speak.

This whole question of rewards and punishments presupposes a certain relation between the school as a whole and its individual members—one of partial hostility, or at least divergence of interest. It may be true that this divergence is bound to exist in the State as a whole, but in the school it should be possible to eliminate it, and Sanderson of Oundle claimed that he had eliminated it by discovering the great principle on which to build education—the principle of free creative work in the interest of society.

"The actual love of work spreads, and ultimately everyone comes within its influence and they begin to like the service they are rendering. Finally, competition dwindles and passes away, so that we have reached what appears to be a change in human nature. It is not really a change, but by care and attention calling out what has always been ready there in human nature, namely a first instinctive love to create. I have always held that competition is a secondary interest, and creation a primary instinct. Competition dwindles and passes away. Competition is a very feeble incentive to life. It is cheap and easy to arouse the motive, it is a swift motive, and on the surface of things ready for you, but it is not ever a powerful motive. Half the boys it dispirits and leaves idle and useless.

"The passing of competition leads on to another thing passing away, which is this : You soon find that a body of workers that as a community has attempted to provide for itself, as a community adapts itself to the community spirit, and punishment is totally unnecessary. It was a long time before that dawned on me. I have not, as a Head Master, taken any part in any shape in punishing boys directly, either by the easy methods supposed to

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train them for after life, or by the other methods that have sprung from the fertile brains of a dominant order. Punishment, I declare from years of experience in this experiment, is a crime ; not only a crime but a blunder. Why ? Because it is a cheap and easy thing. If you punish it is easy, but if a community has so to arrange itself and adapt itself as to produce the reaction on the individual not to do objectionable things, that is hard. It is complicated. It requires an abundance of real sacrifice. It demands readjustment of everything upon a basis of service. I have been much impressed recently by the effect of having punishment organized in removing any activity on the part of the community itself towards adjusting itself so that punishment should not be necessary. I used to flatter myself, 'I don't punish that boy, my prefects do ; they keep me right.' But I have been convinced by my thirty years of experiment that that was all wrong. These things come slowly. Now, without any action on my part, the prefects have stopped punishing, and a good thing for them. If they leave their boots about, the small boys will too, and they will have to punish them for doing so. To leave your own boots about like a lord is a fine thing, and to punish the small boy who does so is also a fine thing ! But it is easy. The hard thing is never to leave your own boots about. . . ."¹

This brings us to the deeper problem of discipline. School order is one thing, character or morality is another. We sometimes see the severance of the two in children. Many of the most tiresome children are really good. The fidgeting, question-asking, and whispering are merely indications of health and a lively mind which receives insufficient satisfaction in school work. The children are kindly, honest, and charming as soon as they are in more natural surroundings ; on the other hand there are children who cause far less trouble in class but who have vicious tendencies which

¹ *Sanderson of Oundle*, p. 360.

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make them cruel or lying in private. If the school is to be successful it is these deeper vices that it must deal with. Throughout the school life the teacher must by action and precept encourage the social virtues and when he has to deal with lapses from them his first thought must not be vengeance, but an attempt to understand the reasons for the offence and to remove those causes if possible. This moral training is closely connected with religion, and there are certain religious bodies which manage to achieve a standard of politeness and order in their schools which is considerably above that of the non-sectarian schools in the same district.

This does not mean that there is a necessary or invariable connection between manners and religion, but if we define politeness as the art of so living as to cause the minimum of discomfort to one's neighbours, Christian principles, firmly believed and continually in mind, do accord with such consideration. Moreover, bad manners and the social vices spring from attaching an excessive importance to oneself. Religion brings one into touch with the infinite divine and with the whole brotherhood of man. It seems folly to hustle or cheat over Arithmetic in such an august presence.

QUESTIONS FOR DISCUSSION

- 1.—Give an account of a system of rewards and punishments that you have actually experienced, and criticize it.
- 2.—Find out all you can about the English penal system. What aim is it meant to achieve, and how far do you think it likely to be effective?
- 3.—On what does the prestige of (a) the policeman; (b) the judge; (c) the king; (d) the archbishop; (f) the actress, who advertises beauty preparations, depend? What sources of prestige has the teacher?
- 4.—The American abuses the ineffective methods of ticket distribution at the London terminii. Why do the British public suffer it so meekly?
- 5.—From the history of Education discuss the methods of discipline used in schools at different ages. How did these reflect the aims and general level of civilization of the day?

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- 6.—Make a list of, and consider children's "naughtinesses" which are only so because they are inconvenient in school. Can you plan an ideal school in which these things would not be naughty?
- 7.—How would you deal with : (a) a child who was consistently cruel to insects and animals; (b) a child who seemed incapable of distinguishing between fact and imagination; (c) two children who vied with each other in dare-devil tricks; (d) the child of apparently unclean mind who had an undesirable influence over the other children?
- 8.—Discuss the advantages and disadvantages of the competitive spirit in schools.

BOOKS

NORMAN MACMUNN, *The Child's Path to Freedom*.

JOHN LOCKE, *Thoughts Concerning Education*, esp. 43-69 and 72-88.

GILBERT A. CHRISTIAN, *Head Teachers' Manual*, ch. xiv. The matter of discipline from the side of the head and law.

SOPHIE BRYANT, *Moral and Religious Education*.

C. BURT, *The Young Delinquent*. Illustrative cases should be read, especially such as pp. 79, 84, 131, 323, 325, 349, etc.

H. C. WELLS, *Sanderson of Oundle*.

MARGARET EYLES, *The Woman in the Little House*.

H. COURTHOPE BOWEN, *Froebel*.

PART III

INTRODUCTION

IN Hardy's *Jude the Obscure* the Inspector enters the room and the teacher faints flat on the floor from nervousness. Very few teachers do that to-day.

An Inspector visiting a Durham school in the "good old days" of the annual examination, used to arrive on horseback in full hunting kit, smack his boot with his whip, shout at everybody concerned, and get through his work in time for the meet.

Times have changed. The alteration is in part due to the general change of manner and morale that has come over England in the last fifty or sixty years, it is also partly due to the change in the teacher. The teacher of a few years ago was often poorly educated, always poorly paid, over worked and generally despised. He can now take a high and honourable place in social life and have enough leisure and vitality to make a life and interests for himself outside his work. If anybody wanted to bully him, and very few do, they would find it difficult. He has personality and pride and is a member of one of the strongest trade unions in this country. Teachers should remember all these facts, and they should remember them not only for their own sakes but also for the sake of the children they teach. He is a better teacher as he is a better man. A teacher should use his power to secure not only better salaries for himself but open windows and hot water for all.

There is to-day a widely spread interest in schools and school buildings, and enlightened L.E.A.'s and officials

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are very ready to do the best that can be done. Obstruction, where it exists, generally comes from backward L.E.A.'s who are afraid of their ratepayer's criticisms. But in these areas, the parents themselves, hearing of good things elsewhere, force their own L.E.A.'s hands.

HOW THE MACHINE WORKS

EVERY child in England has to attend school, or be otherwise adequately educated. Therefore, adequate education must be available free of charge for every child, whether he makes use of it or not. His parents may choose to send him to a private school, or as a fee payer to a secondary school, but every parent can demand that his child be received into any elementary school in his district to which he applies if there is accommodation available there. If there is not, he may have to send his child to another school within reasonable distance, but he can refuse to send him to a denominational school. It is the statutory duty of all L.E.A.'s to see that accommodation is available.

The law would be comparatively simple to administer and the school system fairly comprehensible and easy to organize if our present system were not complicated by our doubly dual system of control. Unlike most other European countries and America, administration is carried on both from the central national authority, the Board of Education, and by Local Education Authorities, i.e. the County, County Borough, Borough and Urban District Councils throughout the kingdom. The control of the schools, both nationally and locally is, however, very largely administrative, and it has been the tradition in England that *educationally* the schools are very free. In America, for example, syllabuses, schemes, time tables, curricula may be laid down by the State authority. In some European countries, text-books and syllabuses are prescribed. But, as has been said, and continually implied in this book, the Head Teacher in every school is free, within very wide limits, to determine his own time table and curriculum. He alone is responsible for schemes of

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work and syllabuses, general organization, and methods employed. Teachers from less fortunate countries are often amazed at this evidence of public trust in the teachers, which, as everyone knows, is practically never abused. It is rare, indeed, to hear any criticism of a Head or a teacher for using his freedom to spread political propaganda, or indeed to hear any criticism of the teachers' conscientiousness in doing what they believe to be best for the children. Certain writers in and to the popular press from time to time have a field-day or two at the expense of some poor child who didn't know the capital of Siam when a prospective employer asked him, or who lament that Spelling and Arithmetic and Handwriting are not what they were in their enlightened young days:—but the integrity of the teacher is practically never called in question.

The other dual control is due to the persistence in England of schools provided voluntarily by various bodies, generally religious. Thus the Church of England, the Roman Catholic Church, the Wesleyans, or the Jews have provided (very often in the period before education became compulsory) buildings in which education, now financed by the State, goes on. The buildings belong to the body which provides them, and must be kept in repair by them, although the L.E.A. decorates them, cleans them, and pays for their heating and lighting. It also equips them and under some circumstances may surface the playground. The teachers are appointed by the managers of the voluntary body, but are paid by the L.E.A., largely out of government grants. The L.E.A. may object to their appointment on educational grounds, i.e. if managers appointed a Head who was not certificated the L.E.A. would object, or if they had reason to believe that a particular teacher was incompetent. The system as a rule works quite smoothly as regards staffing. Under the new Education Act of 1936, where managers have accepted a grant of money from the L.E.A. towards the building of a new

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senior school, the teachers will be appointed in such voluntary schools by the L.E.A. and objection to their appointment only on the grounds of their inability to teach the particular creed avowed by the voluntary body can be made by the managers.

In the council or "provided" schools the buildings are provided by the L.E.A., and staffed and equipped by them directly.

It is obvious that in this matter of compulsory universal education a great deal of public money is involved. The education estimate in last year's budget was £54,636,000. This is, of course, the share paid from the government exchequer, and was only part of what we spent on education, for in every area part of the general local rate is ear-marked for this purpose. The exchequer grant to local authorities is based on the average attendance of children as recorded in the school registers. That is why the accurate keeping of registers looms so large and becomes what appears to be a fetish in some Head Teachers' eyes. If a register is suspect in any way, all kinds of questions may be asked about it, and the local authority may be put to much trouble. Proportional grants, in varying amounts, are made from the national exchequer to the local authority, for teachers' salaries, new buildings, equipment and the general needs of education. This and local expenditure is checked by Government as well as by local auditors. When any new development is considered by Parliament to be urgently necessary, increased grants are given, e.g. the 50 per cent. grant made for new buildings in 1934 towards re-organization. As is well known, the general administration of an area is nearly always carried out by an official paid by the L.E.A. to do the work. He may be called a Director, an Education Officer, or a Secretary and may be paid anything from £400 to £2,000 a year or more according to the importance of his job and the generosity of the local authority. He acts as correspondent with the Board, and has, of

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course, an office staff of clerks. The L.E.A. may also employ local Inspectors to visit the schools and supervise and advise on, not only the equipment and general organization, but the actual teaching. Often these Inspectors are specialists, e.g. in Domestic Science or Needlework. And there may be local organizers in Physical Training. These Inspectors and organizers generally hold classes for teachers and may advise the Director about promotions and general educational problems and conditions in the schools.

The central authority, the Board of Education, is a curiously English anomaly. It consists of personages such as the Archbishop of Canterbury, but actually has never met. In practice, the Board consists of the Minister for Education, and the Parliamentary Secretary, and the permanent officials who occupy the Board of Education's premises in Whitehall.

But if the Board had only these permanent officials in London, it would be out of touch with local conditions. It has, therefore, a staff of some 350 Inspectors for the whole country—for work in all kinds of State aided schools—secondary, technical and special as well as elementary.

The function of these Inspectors is to act as liaison officers between the local authorities and the Board in Whitehall, and to report to the Board on the efficiency and adequacy of the education provided in the local areas. Their work may include many other activities as need arises, and they may advise and help local authorities in general administrative problems and by personal contact make the workings of this very complicated machine smoother than it might otherwise be.

One piece of work which falls to the lot of the Board Inspector is the inspection of teachers on probation. Teachers are trained in colleges which, like the schools, may be provided entirely out of public funds, or whose buildings may be provided by voluntary bodies anxious to have teachers of their own sect or creed to teach in

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their schools. As in the schools also, the staff and equipment of the Training Colleges are provided by State funds, and, moreover, students in training receive a grant of some £30 (women) or £40 (men) a year towards their fees and maintenance. They may attend a university and take a degree, while being members of a University Training Department. Having the degree, they will then take a year of professional training, and thus spend four years in preparation for their work. Or they may go to an ordinary Training College for two years and obtain a Board of Education Teacher's Certificate. As so large a proportion of the money expended on their training is public money, the intending teachers undertake at their entrance to college, to teach in a recognized school. Their undertaking is not always rigidly enforced, but it may be, and the ex-student *may* be required, if he is required to teach and does not, to repay part of the grants made to him.

When he begins to teach the teacher remains on probation for a year and his certificate is then endorsed and he is fully recognized as a trained certificated assistant. It is the district H.M.I. who certifies his satisfaction or otherwise to the Board, and for this purpose he generally inspects the probationer at some time during the year. But if the teacher has had a good teaching mark at college, and the local authority and Head Teacher are satisfied that the young teacher is going to be all right, H.M.I. may not visit him at all. If the L.E.A., Head Teacher and H.M.I. are in doubt as to whether the probationer is going to be successful or not, his probation may be extended for six months. It is very rare for a probationer to be failed outright. Generally every chance is given to him. He may be tried in another school, or with children of different age ; he may be helped by Heads and by Inspectors. The trembling probationer can take it to heart for his comfort that everybody wants him to pass, for it is

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a long and troublesome business, to put it on the lowest grounds, to get him failed ! Also, as a lot of public money and many people's time have been spent on him, it is felt generally that some good ought to come out of it all. There are critics of the system who feel that the purgation of the teaching profession of its weaker members ought to be much more drastic than it is, and many advocate a more thorough sifting at the end of the first year in college, or a higher percentage of failures in the certificate examination. It is rather late in the day to turn people out during the probationary year !

It might be helpful to close with a word about the relation of the teacher to his employers and to Inspectors. As has been said, the Head Teacher in England is left very free, and, if he is making a reasonable success of what he is doing he is very unlikely to meet with criticism strong enough to force him to change. The L.E.A., of course, may issue all kinds of orders concerning transfer of children, or even sometimes pamphlets on what children at different stages are required to know. The latter practice is becoming rarer. Administrative orders must, of course, be obeyed. But the Head Teachers generally have their own local association and make representations to the L.E.A. It is very desirable that these associations should concern themselves with such things as scholarships and examinations, record cards, transfers from school to school, treatment of probationers, etc., and in many areas they do, and their findings are seriously considered by the L.E.A. and have effect on the conduct of the schools. The Heads and teachers also generally belong to a powerful trade union which investigates alleged injustices to individual teachers and is in a position to interview L.E.A.'s and the Board and bring pressure to bear on both. In dealing with these individual cases it is generally most helpful and tactful to both sides. It has acquired through long experience of its local officials a new, good knowledge of varying conditions

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and personalities, and can sift very quietly and effectively a good case from a bad. It is always listened to with respect and can often bring about adjustments which will save trouble in the future as well as help at the moment. It is a pity that its more widely known activities of agitation for better salaries for teachers has rather overshadowed this other very useful function.

A teacher then has always a court of appeal if he feels he is suffering unduly in any way, and a source of advice is at hand.

The local Inspectors are the officials of the local authority and their influence and power may vary very much from area to area. At the best they are on good terms with the teachers, and in fact their own success depends on winning the confidence and co-operation of teachers to carry out their ideas. Both local Inspectors and teachers are employed by the L.E.A. and, therefore, appeals from either direct to the L.E.A. are possible, and, in fact, are made in cases of difficulty.

Fortunately the nervous apprehension with which the Board's Inspectors were once regarded in the schools is disappearing. Their work is very widely spread, and they have far less time and thought to give to the work of individual schools than they would like to have, and only in difficult or outstanding cases, can they afford the time to think much or do much about individual teachers.

Also, Inspectors, rightly or wrongly, are increasingly occupied with administrative matters. They advise on plans of re-organization, they see and consider the plans of every new school which is built, or any alterations which take place in one, they organize courses and lecture in them, they run hither and thither on all kinds of jobs and only with difficulty fit in the requisite number of inspections of schools. They are then concerned with the quality of the school as a whole. They necessarily look at the various parts of the school

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in varying amounts of detail, but they must in the end try to estimate what it all amounts to for the children who attend the school. Are they, or are they not, getting a reasonably good education on a sufficiently wide basis ? If not, where lie the weaknesses and what can be done to improve matters ? Only if a school is so bad that it can be said to be inefficient according to the code can anything be done by the Board ; and then it is the L.E.A. and not the school which is punished. In such a case, extremely rare, the grant payable on that school may be stopped or postponed. It is therefore the L.E.A. which must see to it that such a sad state of affairs doesn't happen.

Nearly every report by an Inspector to the Board on any one school sets out to give a picture, more or less complete, of the school as a whole. No person is ever mentioned by name. If it were found that the History teaching was ineffective, this would be stated, and only by implication would it be known in the school who was responsible for that.

It should be realized by young teachers especially that in every system which employs thousands of people of all types that in every grade there will necessarily be good and less good people. The teacher may be unfortunate in the personalities he meets, and, of course, the school may be unfortunate in the teacher it happens to get. He should also remember that everybody, even Heads, Directors, and Inspectors may have "off" days or may get things out of proportion as he himself might also do.

It is his bounden duty to try to keep from the beginning a part of himself aloof from his job, an ability to sit back and survey what he is doing and why, and above all to keep alive a sense of humour, remembering that the final verdict will probably never be summed up by any one person, and may never be even consciously realized by anybody, but it will be what he has made of the individual children in his charge.

APPENDIX

EXAMINATION QUESTIONS

- 1.—What steps can a teacher take to give children an interest in their school which will persist after they leave ?
- 2.—What are the main functions of an elementary school, and how far do you consider the curriculum at present in vogue performs them ?
- 3.—What use would you make of any two of the following if you had them in school, and what particular benefits would you expect your class to derive from them : a wireless set, a gramophone, a magic lantern, a cinema.
- 4.—What forms of individual record would you keep for the members of your class, and what advantage would this be ?
- 5.—In arranging your work what differences in treatment would you make between Standard VII and Standard II ? Discuss both matter and manner.
- 6.—What means has the teacher of ascertaining whether
 - (a) the children of his class are of average ability,
 - (b) their attainments reach a standard appropriate to their ability ?
- 7.—What is good discipline ? According to your definition, state what means you would take to secure it.
- 8.—What are the purposes of periodic class examinations, and what are the main characteristics of a well-conducted examination ?

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- 9.—“ It is a great mistake to suppose that questioning a class is the same as teaching it.” Discuss this. For what different purposes in school work is questioning useful ?
- 10.—What special problems for the teacher does the half-yearly promotion of children involve ?
- 11.—By what means can good taste be inculcated in schools ?
- 12.—“ The good educator aims at making himself superfluous.” Discuss this in relation to class-teaching and individual work.
- 13.—A teacher often has to choose between giving information to a child and leading him to discover things for himself. What consideration should guide his choice of method ?
- 14.—Describe the advantages and disadvantages of the “ mixed ” elementary school for boys and girls.
- 15.—Discuss the arguments for and against vocational training in the top classes of the elementary schools.
- 16.—Trace the growth and estimate the value of the school medical service.
- 17.—What steps would you take to deal with the following school problems :
 - (a) an inadequate and ugly playground,
 - (b) children obviously neglected at home because both parents go out to work,
 - (c) an only child pampered at home ?
- 18.—How would you use the following in school work :
 - (a) sunlight,
 - (b) a small patch of garden in the playground,
 - (c) a magic lantern,
 - (d) the local factory,
 - (e) a civic historical pageant ?

EXAMINATION QUESTIONS

- 19.—Account for the widely spread antipathy to school subjects to be found in ex-students of the schools.
- 20.—If you were an Inspector of schools what, for you, would be the six most important things to look for in a school?
- 21.—Describe any means you know of by which parents and teachers have been brought together to discuss and plan children's education.
- 22.—Consider what influence the votes of women from twenty-one years upwards will have upon future governments' educational policies.
- 23.—Would you wish your own child to be educated in the school that you attended? Say in what particulars you would wish it to be improved, and how.
- 24.—The report on elementary school children leaving the schools this year (1928) states that, although they were reared during the Great War, they are taller, heavier, and more intelligent than were their parents at the same age. Review the conditions which have brought about this improvement.

BIBLIOGRAPHY

Books by authors marked * are more important than others.

*JOHN ADAMS

Herbartian Psychology. (D. C. Heath & Co.)
Exposition and Illustration in Teaching. (Macmillan.)

MATTHEW ARNOLD

Reports on Schools. (H.M. Stationery Office.)

THOMAS ARNOLD

Miscellaneous Works.

*W. C. BAGLEY

Educational Values. (The Macmillan Co.)
Craftsmanship in Teaching. (The Macmillan Co.)
Class Room Management. (The Macmillan Co.)

*P. B. BALLARD

The New Examiner. (Hodder & Stoughton.)
Group Tests of Intelligence. (Hodder & Stoughton.)

*E. BANKS

School for John and Mary. (Putnam.)

MARK BENNEY

Low Company.

JACK BLACK

You Can't Win.

*BOARD OF EDUCATION

Committee on Education and Industry, Part II. (H.M. Stationery Office.)

Hadow Report. (H.M. Stationery Office.)

Teaching of English in England. (H.M. Stationery Office.)

The New Prospect in Education. (H.M. Stationery Office.)

Elementary Education Codes. (H.M. Stationery Office.)

Suggestions for Teachers. (H.M. Stationery Office.)

Cost per Child. Elementary Education. (H.M. Stationery Office.)

Health of the School Child. (H.M. Stationery Office.)

The Primary School. (H.M. Stationery Office.)

The Infant School. (H.M. Stationery Office.)

Elementary School Buildings. (H.M. Stationery Office.)

*H. COURTHOPE BOWEN

Froebel. (Heinemann.)

BIBLIOGRAPHY

CHARLOTTE BRONTE

Jane Eyre.

Villette.

SOPHIE BRYANT

Moral and Religious Education. (Arnold.)

*C. BURT

The Young Delinquent. (University of London Press.)

DOROTHY CANFIELD

Her Son's Wife.

The Bent Twig.

*NANCY CATTY

Training in Appreciation. (Sidgwick & Jackson.)

GILBERT A. CHRISTIAN

Head Teachers' Manual. (Nelson.)

CALDWELL COOK

The Play Way. (Heinemann.)

*JOHN DEWEY

School and Society. (University of Chicago Press.)

EVELYN DEWEY

Dalton Laboratory Plan. (Dent.)

CATHERINE DODD

The Farthing Spinster.

The Child and the Curriculum. (Swan Sonnenschein.)

KATHERINE ELIZABETH DOPP

The Place of Industries in Elementary Education.
(University of Chicago Press.)

*MARGARET EYLES

The Woman in the Little House. (Grant Richards.)

JAMES FAIRGRIEVE

Geography in School. (University of London Press.)

*J. J. FINDLAY

History and its Place in Education. (University of
London Press.)

Principles of Class Teaching. (Macmillan.)

The Foundations of Education, Vol. II. (University of
London Press.)

R. GURNER

The Day Boy.

MARY ELIZABETH HALDANE

A Record of a Hundred Years.

*G. STANLEY HALL

Educational Problems. 2 vols. (Appletons.)

EDMOND HOLMES

What is and What Might Be. (Constable.)

MATTER AND METHOD IN EDUCATION

T. H. HUXLEY

Lay Sermons, Addresses and Reviews. (Macmillan.)

ALF JENNINGS

Through the Shadows with O. Henry.

M. W. KEATINGE

Suggestion in Education. (A. & C. Black.)

*W. H. KILPATRICK

Foundations of Method. (The Macmillan Co.)

*GREENING LAMBORN

Rudiments of Criticism. (Clarendon Press.)

Expression in Speech and Writing. (Clarendon Press.)

JOHN LOCKE

Thoughts Concerning Education.

JACK LONDON

The Jacket.

MACARTNEY

Walls have Mouths.

GEORGE MACKANESS

Inspirational Teaching. (Dent.)

NORMAN MACMUNN

A Path to Freedom in the School. (Bell.)

W. MACPHERSON

The Study of English Literature. (Cambridge University Press.)

*A. A. MATTHEWS

Education for Life.

WILLIAM MORRIS

Lectures on Art.

*J. NICHOLSON

Education and the Modern World.

*HELEN PARKHURST

Education on the Dalton Plan. (Bell.)

N. ALDERTON PINK

Procrustes, or the Future of Education. (Kegan Paul.)

PLATO

Dialogues

POEMS CHOSEN

(Blackwell.)

SIR A. QUILLER-COUCH

The Art of Reading.

The Art of Writing.

*T. RAYMONT

Education.

KENNETH RICHMOND

The Curriculum. (Constable.)

BIBLIOGRAPHY

RUSKIN

Fors Clavigera.
Modern Painters.

*BERTRAND RUSSELL

On Education. (George Allen & Unwin.)

Sanderson of Oundle

(Chatto & Windus.)

ELEANOR SCOTT

War Among Ladies.

MRS SHERWOOD

The Fairchild Family.

Autobiography.

*W. G. SLEIGHT

Organization and Curricula of Schools. (Arnold.)

SNEYD KYNNERSLEY

H.M.I.

STAFF OF STREATHAM COUNTY SCHOOL

Dalton Plan Assignments. (J. Bell.)

L. M. STEDMAN

Education of Gifted Children. (Harrap.)

J. A. STEVENSON

Project Method in Teaching. (The Macmillan Co.)

D. M. STUART

The Boy Through the Ages.

MARY STURT

The Psychology of Time. (Kegan Paul.)

STURT AND OAKDEN

Pattern Plays. (Nelson.)

Great Venturers. (Bell.)

GODFREY THOMSON

Instinct and Intelligence.

Northumberland Mental Tests. (Harrap.)

THUCYDIDES

Peloponnesian War.

*W. S. TOMKINSON

The Teaching of English. (Clarendon Press.)

G. WAFFE

Colleagues.

HUGH WALPOLE

Mr Perrin and Mr Trail.

H. G. WELLS

Love and Mr Lewisham.

Joan and Peter.

J. WHISTLER

The Gentle Art of Making Enemies.

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